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Dell Compellent Storage Center 6.3 (SC8000)

50,000 Mailbox Exchange 2010 Resiliency Storage Solution

Dell Compellent Technical Solutions



Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution
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Introduction

Simulated Environment

The solution presented in this document is designed to simulate a very large number of mailboxes hosted on highly redundant hardware. Application level redundancy is augmented with redundant storage to create a highly available and fault tolerant solution.

The Mailbox Resiliency features of Exchange 2010 have greatly enhanced the availability of Exchange 2010, while also improving I/O performance. The solution presented here is a Mailbox Resiliency solution utilizing 2 Database Availability Groups (DAGs) and 2 copies of every database. The tested environment simulates all users in these DAGs running on a single Storage Center of the 2 Storage Center configurations, as in a failover event. The number of users simulated was 50,000 across 10 servers, (5 servers per DAG), with 5,000 users per server. The mailbox size was 2GB per user. Each server has 5 databases, with one copy local and the second copy replicated to a second server on a second Storage Center. This provides redundancy through hardware and software.

The replication mechanism is the native Exchange 2010 DAG log shipping engine. This is a very efficient and reliable replication mechanism and is the recommended method for providing highly-available and redundant Exchange solutions.

Solution Description

The storage hardware tested was a Dell Compellent Storage Center 6.3 (SC8000). This is a redundant controller pair, with redundant front-end and back-end connections. The front-end connections were fiber-channel based, over redundant fabrics, with 2 ports per server, and 4 ports per controller. Two 24 bay 2.5" drive enclosures are utilized with each Storage Center.

The disk connectivity is SAS 6Gbps. The spindle count is 190 disks/7 spares for database and logs, on a dedicated disk pool on each Storage Center. As this is a redundant solution, databases and logs are stored together on the same volumes. All volumes are RAID-5.

What's new for Storage Center 6.3 ESRP?

This document is based upon an updated configuration of the original 50,000 Mailbox ESRP that was published using Storage Center 6.2 (SC8000) in June of 2012. Due to performance increases in the 6.3 version of Storage Center and other updates, the following configuration items were changed in this version:

- 190 x 900GB active spindles pers Storage Center (vs. 199 spindles)
- A single RAID-5 volume per database (vs. RAID-5 volume for database + RAID-10 logs)
- Dell PowerEdge R620 (G12) servers (vs. PowerEdge R610 (G11) servers)

For information about compatibility please use the following link:

http://windowsservercatalog.com/item.aspx?idItem=9fb76108-7f81-d263-24dd-7c037bd9a4d1&bCatID=1282

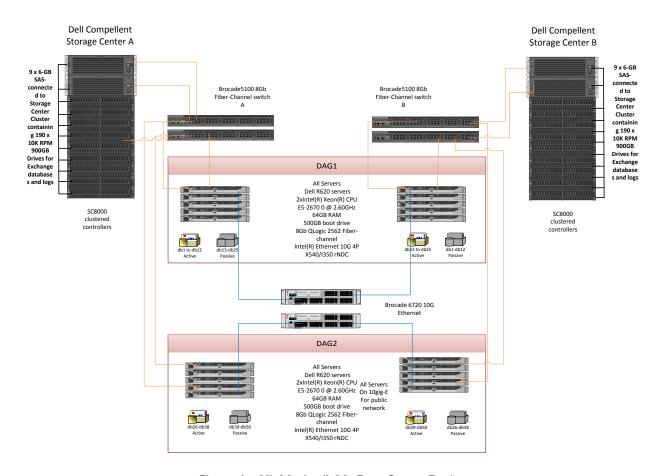


Figure 1 – Highly Available Data Center Design

The solution is designed around a highly available data center model (Figure 1). There are 2 disk arrays, for complete redundancy. The Exchange configuration is 2 DAGs, with half the servers and databases in each DAG. The LAN ports are in a dedicated replication VLAN, for traffic isolation. There are 2 networks for redundancy..

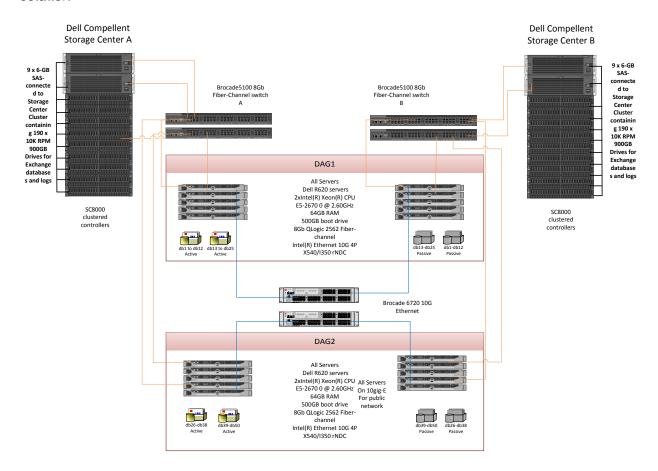


Figure 2 - Tested configuration with Storage Center A with Full user Load and Storage Center B offline

The tested configuration was a single Storage Center array (Figure 2), running with the full user load. This is to clearly show a single array can handle the user load in an array failure scenario. Under normal operating conditions the preferred activation scenario would be to run half of the mailbox databases active on each Storage Center array, while either array could handle the entire workload at any given time.

The ability to handle the entire workload on a single Storage Center array means no IO performance degradation will occur if an array or any volume(s) were to fail. All mailbox servers would have volumes mapped to both arrays, with 1 copy of each database on each array.

The Dell Compellent Storage Center (SC8000) Solution

A Modular Hardware Design

The hardware design consists of Dell 12G server-based clustered controllers providing automatic failover. Dell Compellent can seamlessly connect to any open-systems server without the need for server side agents. Organizations can mix and match Fiber Channel and iSCSI server connectivity, and disk enclosures support any external interface and disks based on Solid State, Fiber Channel, and/or Serial ATA.

Next-generation SC8000 controllers combine the benefits of proven DellTM Fluid DataTM architecture with resilient Dell hardware design to provide efficiency, quality and durability. Compared with previous generations of Compellent controllers, the SC8000 offers increased density, exceptional processing power, greater memory, and faster PCIe Gen3 I/O bus — making the SC8000 the scalability and performance platform choice for the future.

Powerful Suite of Software

Storage Center offers a powerful suite of enterprise capabilities to manage data differently. Building on Dell Compellent's Dynamic Block Architecture, Storage Center software intelligently optimizes data movement and access at the block-level to maximize utilization, automate tiered storage, simplify replication and speed data recovery.

Intuitive, Unified Interface

A centralized management interface streamlines administration and speeds common storage management tasks. The interface features a point-and-click wizard-based setup and management, comprehensive Phone Home capabilities, automatic notification when user-defined capacity thresholds are reached, and advanced storage consumption and chargeback reporting.

Dell Compellent's Enterprise Manager further simplifies storage management by providing comprehensive monitoring of all local and remote Storage Center environments.

Enterprise Manager allows you to gain better insight into your Storage Center deployments and reduces planning and configuration time for remote replications.

The ESRP-Storage program focuses on storage solution testing to address performance and reliability issues with storage design. However, storage is not the only factor to take into consideration when designing a scale up Exchange solution. Other factors which effect the server scalability are: server processor utilization, server physical and virtual memory limitations, resource requirements for other applications, directory and network service latencies, network infrastructure limitations, replication and recovery requirements, and client usage profiles. All these factors are beyond the scope for ESRP-Storage. Therefore, the number of mailboxes hosted per server as part of the tested configuration may not necessarily be viable for some customer deployments.

For more information on identifying and addressing performance bottlenecks in an Exchange system, please refer to Microsoft's Troubleshooting Microsoft Exchange Server Performance, available at http://go.microsoft.com/fwlink/?LinkId=23454.

Targeted Customer Profile

This solution is targeted for users large and small. Capacity can be dynamically scaled from 1TB to over a Petabyte. This provides excellent growth potential with no downtime required for upgrades.

- A Storage Center solution can be sized for any size organization
- Unlimited number of hosts can be attached, via Fiber-Channel and iSCSI
- User IO profile (.15 IOPS per user, .18 tested, giving 20% headroom).
- User mailbox size (2 GB quota)
- Backup strategy VSS backup using SAN based snapshots, use Mailbox Resiliency as primary data protection mechanism.
- Using SAN based snapshots, and boot from SAN, a complete server can be restored in minutes.
- The tested RAID type was RAID5 for database volumes and log volumes, while a mix of RAID10, RAID5, and RAID6 can be blended, with fully automated tiered storage providing the most efficient and best performing storage where needed.

Volume sizing

- The volume size tested was just large enough to support the database size. Volumes on Dell Compellent storage can be grown dynamically, without affecting service. As database sizes approach volume sizes, any volume can be automatically increased on demand. This simplifies sizing, as capacity can be added as needed.
- Using Dell Compellent Dynamic Capacity and hot upgrades, additional disk capacity
 can be added as needed. If more spindles are required to accommodate growth they
 can simply be cabled and added to the disk pool to grow volume space. Since
 volumes are not tied to spindle boundaries adding spindles will increase performance
 and capacity as the system grows.
- The testing environment was configured for 75% storage utilization. If the storage requirement grows beyond the design specified, additional spindles will provide additional capacity for any volume to be expanded.

Tested Deployment

The following tables summarize the testing environment.

Simulated Exchange Configuration

Number of Exchange mailboxes simulated	50,000
Number of Database Availability Groups (DAGs)	2
Number of servers/DAG	10
Number of active mailboxes/server	5000
Number of databases/host	5
Number of copies/database	2
Number of mailboxes/database	1000
Simulated profile: I/O's per second per mailbox (IOPS, include 20% headroom)	.15 (.18 tested)
Database/Log LUN size	2.2 TB
Total database size for performance testing	110.8 TB
% storage capacity used by Exchange database**	75.85%

Note: Database size and capacity utilized may not match on a thin-provisioned system, as only used pages will consume space. Pages that are allocated, but contain blank data, may not use disk.

Primary Storage Hardware

Storage Connectivity (Fiber Channel, SAS, SATA iSCSI)	SAS
Storage model and OS/firmware revision	Dell Compellent Storage Center (SC8000) v6.3 http://windowsservercatalog.com/item.aspx?idItem=9fb76108-7f81-d263-24dd-7c037bd9a4d1&bCatID=1282
Storage cache	16 GB
Number of storage controllers	2
Number of storage ports	8 active ports per controller
Maximum bandwidth of storage connectivity to host	64 Gb/sec (8x8Gb GB HBA)
Switch type/model/firmware revision	Brocade Model 510 36- port 8Gb Fiber Channel Switch Firmware version 7.0.0b
HBA model and firmware	QLogic QMH2564 (Driver FW 5.04.04, Flash FW 4.04.02)
Number of HBA's/host	1 Dual-port QLogic 2562 8Gb HBA
Host server type	2x8 Core E5-2670 2.60Ghz 64GB RAM

Total number of disks	190 Active for DB and log, 7 hot spares = 197 total spindles
tested in solution	
Maximum number of	960
spindles can be hosted in	
the storage	

Primary Storage Software

HBA driver	QLogic StorPort FC HBA Driver 9.1.9.27
HBA Queue Depth Setting	65535
Multi-Pathing	Microsoft Windows 2008 R2 MPIO Round-Robin(In-Box DSM)
Host OS	Microsoft Windows 2008 R2
ESE.dll file version	14.02.0283.000
Replication solution name/version	Microsoft Exchange Server 2010 DAG replication

Primary Storage Disk Configuration (Mailbox Store/Log Disks)

Disk type, speed and firmware revision	SAS 10k 900GB, XRC0
Raw capacity per disk (GB)	838.36 GB
Number of physical disks in test	190
Total raw storage capacity (GB)	159.29 TB
Raid level	RAID5
Total formatted capacity	137.5 TB
Storage capacity utilization	75.87 %
Database capacity utilization	67%

Best Practices

Exchange Server 2010 has changed dramatically from previous versions. For a list of what has changed see the following: http://technet.microsoft.com/en-us/library/dd298136.aspx

The best practices have also changed, based on the changes in behavior in Exchange 2010. A big part of the change is the shift away from Single Instance Storage. This allows greater control over disk IO, as a mailbox is more self-contained within the database, changing reads and writes to or from a mailbox to be much more sequential. This greatly improves throughput.

The increase in database size is offset by inline page compression, so that database sizes in Exchange 2010 are similar to Exchange 2007 sizes. This does have an impact on processor and memory load. Because processor performance has increased dramatically, and servers support much larger memory models, sizing requirements for servers have changed to reflect this. For server sizing please refer to the Microsoft Mailbox Role Calculator.

For general sizing and requirements please visit the following link:

http://technet.microsoft.com/en-us/library/aa996719.aspx

One of the Microsoft best practices states that transaction logs and databases be separated from each other and dedicated to their own set of spindles. Dell Compellent virtualizes at the disk level within Storage Center, accelerating data access by spreading read/write operations across all disk drives in the SAN so multiple requests are processed in parallel. Dell Compellent virtualization allows the creation of high performance, highly efficient virtual volumes in just seconds without allocating drives to specific servers, without complicated capacity planning and without manual performance tuning. By managing disk drives as a single resource, Dell Compellent provides increased storage performance, availability and utilization.

Dell Compellent's storage virtualization is optimized to take advantage of all available spindles as part of a single disk folder, but is flexible enough to be configured allowing storage configurations where specific spindles are dedicated to a particular volume.

Another best practice in past versions of Exchange Server has been to align Exchange IO with disk page boundaries. With Windows Server 2008 this is no longer required, as Windows 2008 automatically aligns to a 1024k page boundary.

The volume on which transaction logs are stored is critical to a well performing Exchange environment. Since all transactions are first written to a transaction log before being committed to the information store database, it is important that this volume has the lowest possible write latency. Transaction logs should be placed on volumes with faster rotational speeds. For optimal transaction log performance, consider using drives with a rotational speed of 10,000 RPM or greater. Exchange 2010 no longer requires log files to be stored on

a volume separate from the database volumes; The Dell Compellent Storage Center can be flexibly designed for separate disk folders or as a single disk folder configuration.

For issues related to performance and event monitoring please see the following: http://technet.microsoft.com/en-us/library/ee332313.aspx

For more information on Exchange best practices when implemented with Dell Compellent Storage Center, visit the Dell Compellent Knowledge Center at http://kc.compellent.com/.

Using Dell Compellent Storage Center Data Progression

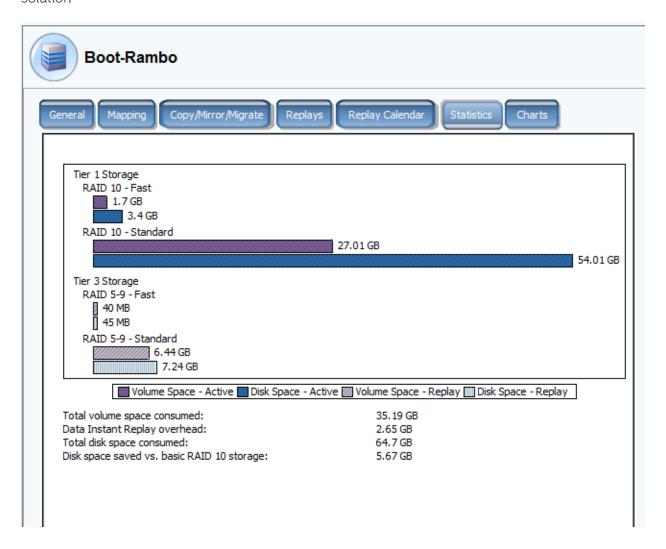
Industry studies show that as much of 80% of Exchange data is inactive. This means that a lot of fast, higher-cost storage is being unnecessarily utilized.

Storage Center's Data Progression is a complete hardware and software architecture that delivers fully automated tiered storage. This patented technology cuts administrative time and reduces overall storage costs by dynamically classifying and moving data at the block-level between tiers of storage based on frequency of access. This complete Automated Tiered Storage solution does not require time consuming data classification and the repetitive manual transfer of data between tiers.

Each volume is configured by default with a recommended storage profile that manages the RAID configuration and provides optimal operation and performance for Exchange on the Dell Compellent Storage Center. With this configuration all data written to each volume is written at RAID10 providing the best possible I/O performance for Exchange database and log operations.

Snapshots, known as Replays on the Dell Compellent Storage Center, are an integral part of the Data Progression solution. As data grows and usage patterns change, Data Progression can automatically move inactive blocks of data to a lower tier of storage (both disk class and RAID level) on-the-fly. With the recommended storage profile, active data is always written at RAID10, while any replays are initially stored at Tier 1 on RAID-5. This data eventually makes its way down the RAID levels and tiers.

The following chart is an example of how Data Progression moves data to the most appropriate tier:



Core Storage

- Dell Compellent storage by its nature does not need disk sector alignment to perform properly. Dell Compellent virtualizes all disk reads and writes, and applies them across system managed data pages, so by nature isolates disk IOs from sector boundaries. The page to sector alignment for all volumes and data pages is handled automatically by the system.
- 2. The Dell Compellent method of IO and disk capacity aggregation provides maximum IO to all hosted applications. All the IOPS for all of the assigned drives can be applied to all applications hosted on a Storage Center. If IOPS need to be dedicated to an application, such as Exchange, a dedicated disk pool can be created for each IO type, such as database or log files. As Exchange 2010 IO is mostly sequential, using a smaller number of database files will greatly improve the performance. This is due to the fact that the more sequential streams you have, the more random it looks. Minimizing the number of file streams while meeting business requirements will

provide a more responsive solution. Isolating the log files can also provide a performance benefit in an IO constrained system. Using Dell Compellent Dynamic Storage, a small system can start with all volumes sharing spindles, and volumes can dynamically be moved to dedicated spindles and load increases.

- 3. Dell Compellent Storage Center is a true thin provisioned system. This means that volumes will truly only consume space when and where data is written. The volume sizes should be created to reflect the maximum size they will achieve. The volumes will only consume the space actually used by data, so the storage can be sized to host the actual storage requirement, rather than the volume sizes allocated. This allows the volumes to be sized properly to meet growth while requiring the minimum number of disks to meet the storage and IOP requirement.
- 4. Dell Compellent's Fluid Data architecture uses an IOP and storage aggregation model. This means that the IOPS and storage capacity of all available disks will be available to the entire disk pool. This provides a huge performance boost to all applications and all LUNs, as the combined IO performance of all spindles will apply to all configured storage. If dedicated spindles are desired, a disk pool can be created that will dedicate those spindles to the LUNs created in that pool. All disks in a disk pool will have multiple RAID types applied to them. This is done by virtualizing the RAID pools on the disks. For example, a write could come in on RAID 10, and would be mirrored at the block level, across a pair of disks. In essence each write could hit a different pair of disks, dramatically improving performance. The next write could be a RAID5 block, with the blocks striped across all the disks available to the pool. In this method a disk pool will balance the IO across all the available spindles.
- 5. Latency and IO load can be measured real-time, or logged historically for reporting purposes. This means if a volume is performing poorly, its IO can be reported over time, and compared to IO load on the server, for any length of time you wish to store. If you need to report on the last month of IO history, a report can be generated showing the IO graphically or as a summary chart. This provides the ability to trend and determine when IO performance changed. Volumes can also be summarized as a group, to determine if IO load is shifting, increasing, or disk performance is changing. Reporting can be done at any level, including at the disk device level. This allows reporting on the latency at the Server, LUN, or disk level to provide more accurate performance monitoring and diagnostics.
- 6. Because Storage Center manages block placement, defragmentation is not required. Dell Compellent Data Progression computes block placement and optimizes block placement based on access patterns. Because block placement is relative to other stored blocks Exchange On-line defragmentation is accounted for.

- 7. Dell Compellent Fluid Data also allows disks to be added to a pool to increase performance dynamically. This allows for accurate sizing on day one and disks to be added as performance requirements increase. If after one year IO requirements double, additional disks could simply be added (without any downtime), and RAID stripes rebalanced.
- 8. The most common cause of performance issues is low spindle count. To achieve a given IO level requires a spindle count equal to or greater than the IOP target. If the IO load exceeds the capabilities of the spindles poor performance will result. Dell Compellent, along with a business partner, will work with customers to determine the correct spindle count. As IO load grows the spindle count must increase to maintain performance. Using Dell Compellent Enterprise Manager, current IO loads can be tracked, and thresholds can be set for alerting, to warn of IO usage approaching or exceeding acceptable performance levels. Because IO patterns can be very diverse, creating a baseline and using historical reporting will be a key strategy for planning for and managing growth. With an accurate growth plan, disk can be added before it is needed, and performance as well as capacity can be increased with down time.

Backup Strategy

- 1. The Dell Compellent Storage Center has an integrated snapshot facility that provides basic volume based snapshots. In order to provide VSS integration with a graphical management interface, Dell Compellent Replay Manager for Microsoft Servers should be implemented. This provides a full interface for scheduling database backups. Using Replay Manger Exchange Servers can be restored in less than a minute to any available restore point. It also provides detailed reporting on snapshots. Because Dell Compellent Storage Center has the ability to manage thousands of snapshots, a fine grained backup strategy can be defined to greatly reduce reliance on tape for historical data recovery. Combined with a lagged database copy, data can be recovered very quickly with minimal administrative effort.
- 2. Since Dell Compellent Replays take do not require page pre-allocation or disk allocation disk space requirements are much smaller for snapshots. Backup verification can also be passed to a secondary server to isolate the impact of backups on the production Exchange environment. By automating the creation and verification process using a secondary server, more frequent database backups and more frequent database scans can be implemented reducing exposure.
- 3. Replay restore points can also be replicated and tested in a remote environment without breaking replication. This allows Disaster Recovery testing of a production restore point without pausing replication, reducing exposure even further.

Additional Information

For more information on Dell Compellent Storage Center and other Dell Compellent solutions, visit our website at http://www.compellent.com.

Test Results Summary

This section provides a high level summary of the test data from ESRP. The detailed html reports which are generated by ESRP testing framework are shown in the Appendices later in this whitepaper.

Reliability

A number of tests in the framework are to check Reliability tests runs for 24 hours. The goal is to verify the storage can handle high IO load for a long period of time. Both log and database files will be analyzed for integrity after the stress test to ensure no database/log corruption.

The following list provides an overview:

No errors were reported in either the application or system log

- No errors were reported during the database and log checksum process
- No errors were reported during either the backup or restore process

Storage Performance Results

The Primary Storage performance testing is designed to exercise the storage with maximum sustainable Exchange type of IO for 2 hours. The test is to show how long it takes for the storage to respond to an IO under load. The data below is the sum of all of the logical disk I/O's and average of all the logical disks I/O latency in the 2 hours test duration. Each server is listed separately and the aggregate numbers across all servers is listed as well.

Individual Server Metrics:

The sum of I/O's across all Mailbox Databases and the average latency across all Databases on a per server basis.

Server I/O - DAG-A

Database I/O	JS6	JS7	JS8	JS9	JS10
Database Disks Transfers/sec	1097.484	1108.814	1083.301	1094.756	1094.159
Database Disks Reads/sec	755.366	762.41	746.396	753.777	753.536
Database Disks Writes/sec	342.118	346.404	336.905	340.979	217.799
Average Database Disk Read Latency (ms)	12.015	11.962	12.044	12.014	11.954
Average Database Disk Write Latency (ms)	2.039	2.084	2.1496	2.1348	1.8684
Transaction Log I/O	JS6	JS7	JS8	JS9	JS10
Log Disks Writes/sec	287.991	290.779	283.382	286.123	286.791
Average Log Disk Write Latency (ms)	0.930	0.932	0.991	0.988	0.940

Server I/O - DAG-B

Database I/O	JS11	JS12	JS13	JS14	JS15
Database Disks Transfers/sec	1062.401	1008.176	1063.063	1067.399	996.162
Database Disks Reads/sec	733.257	698.784	733.654	736.388	691.109
Database Disks Writes/sec	329.144	309.392	329.409	331.011	305.053
Average Database Disk Read Latency (ms)	12.342	12.935	12.295	12.257	12.963
Average Database Disk Write Latency (ms)	2.041	2.024	1.890	2.096	2.049
Transaction Log I/O	JS11	JS12	JS13	JS14	JS15
Log Disks Writes/sec	278.571	264.266	279.371	279.805	260.839
Average Log Disk Write Latency (ms)	0.943	0.955	0.935	0.942	0.944

Aggregate Performance across all servers/DAGs Metrics

The sum of I/O's across servers in solution and the average latency across all servers in solution.

Database I/O	
Database Disks Transfers/sec	8617.152
Database Disks Reads/sec	5940.311
Database Disks Writes/sec	2676.841
Average Database Disk Read Latency (ms)	12.185
Average Database Disk Write Latency (ms)	2.036
Transaction Log I/O	
Log Disks Writes/sec	2258.508
Average Log Disk Write Latency (ms)	0.952

Database Backup/Recovery Performance

There are two tests reports in this section. The first one is to measure the sequential read rate of the database files, and the second is to measure the recovery/replay performance (playing transaction logs in to the database).

Database Read-only Performance

The test is to measure the maximum rate at which databases could be backed up via VSS. The following table shows the average rate for a single database file.

MB read/sec per database	101.494
MB read/sec total per server	507.47

Transaction Log Recovery/Replay Performance

The purpose of this test is to measure the maximum rate at which the log files can be played against the databases. The following table shows the average rate for 500 log files played in a single storage group. Each log file is 1 MB in size.

Average time to play one Log file (sec)	1.383
---	-------

Conclusion

The testing shows the scalability and performance of the Dell Compellent Storage Center.

This document is developed by storage solution providers, and reviewed by the Microsoft Exchange Product team. The test results/data presented in this document are based on the tests introduced in the ESRP test framework. Customers should not quote the data directly

for his/her pre-deployment verification. It is still necessary to go through the exercises to validate the storage design for a specific customer environment.

The ESRP program is not designed to be a benchmarking program; the tests are not designed for getting the maximum throughput for a given solution. Rather, it is focused on producing recommendations from vendors for the Exchange application. Therefore, the data presented in this document should not be used for direct comparisons among the solutions.

Appendix A: Performance Testing

Server 1 – JS6

Test Summary

Overall Test Result	Pass
Machine Name	JS6
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:31:43 PM
Test End Time	6/18/2013 6:07:20 PM
Collection Start Time	6/18/2013 3:33:50 PM
Collection End Time	6/18/2013 5:33:41 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	940.618
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742338486272
Final Database Size (bytes)	10745836535808
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

	3
Instance2792.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2792.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2792.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2792.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance2792.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	12.024	1.982	119.090	68.012	33523.688	36062.251	0.000	0.932	0.000	57.000	0.000	4764.220
Instance2792.2	11.944	2.362	119.324	68.166	33572.085	36110.618	0.000	0.931	0.000	57.512	0.000	4768.274
Instance2792.3	11.904	2.264	119.447	68.297	33616.872	36102.426	0.000	0.929	0.000	57.521	0.000	4769.537
Instance2792.4	12.109	1.938	120.756	68.997	33512.872	36027.866	0.000	0.933	0.000	57.681	0.000	4711.173
Instance2792.5	12.098	1.651	119.882	68.646	33585.837	36099.049	0.000	0.929	0.000	58.277	0.000	4745.865

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2792.1	1.104	232476.354
Instance2792.2	1.114	232533.809
Instance2792.3	1.114	232563.797
Instance2792.4	1.104	232527.691
Instance2792.5	1.124	232475.152

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance2792.1	1.104	232476.354
Instance2792.2	1.114	232533.809
Instance2792.3	1.114	232563.797
Instance2792.4	1.104	232527.691
Instance2792.5	1.124	232475.152

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	12.024	1.982	150.391	68.012	81069.034	36062.251	13.532	0.932	1.104	57.000	232476.354	4764.220
Instance2792.2	11.944	2.362	150.661	68.166	81078.400	36110.618	13.279	0.931	1.114	57.512	232533.809	4768.274
Instance2792.3	11.904	2.264	150.909	68.297	81217.020	36102.426	12.807	0.929	1.114	57.521	232563.797	4769.537
Instance2792.4	12.109	1.938	152.109	68.997	80599.187	36027.866	12.909	0.933	1.104	57.681	232527.691	4711.173
Instance2792.5	12.098	1.651	151.296	68.646	81002.732	36099.049	13.362	0.929	1.124	58.277	232475.152	4745.865

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.755	0.000	2.904
Available MBytes	28633.088	28622.000	28667.000
Free System Page Table Entries	33555161.923	33555100.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	93437943.449	93384704.000	93720576.000
Pool Paged Bytes	231543408.234	229490688.000	232669184.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:39 AM -- Jetstress testing begins ...
6/18/2013 10:56:39 AM -- Prepare testing begins ...
6/18/2013 10:56:45 AM -- Attaching databases ...
6/18/2013 10:56:45 AM -- Prepare testing ends.
6/18/2013 10:56:45 AM -- Dispatching transactions begins ...
6/18/2013 10:56:45 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:45 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:51 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:51 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:56:57 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:56:57 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:56:57 AM -- Attaining prerequisites:
6/18/2013 10:59:17 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210290000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:17 PM -- Performance logging ends.
6/18/2013 1:01:23 PM -- JetInterop batch transaction stats: 29405, 29337, 29553, 29188 and 29402.
6/18/2013 1:01:23 PM -- Dispatching transactions ends.
6/18/2013 1:01:23 PM -- Shutting down databases ...
6/18/2013 1:01:25 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 1:01:25 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.blg has 488 samples.
6/18/2013 1:01:25 PM -- Creating test report ...
6/18/2013 1:01:28 PM -- Instance2792.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:11 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.xml has 478 samples queried.
6/18/2013 1:01:29 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.html is saved.
6/18/2013 1:01:30 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:30 PM -- Verifying database checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:43 PM -- Verifying log checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:\DB4
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_44.xml is saved.
6/18/2013 1:02:44 PM -- Jetstress testing ends.
6/18/2013 1:10:31 PM -- Jetstress testing begins ...
6/18/2013 1:10:31 PM -- Prepare testing begins ...
6/18/2013 1:10:36 PM -- Attaching databases ...
6/18/2013 1:10:36 PM -- Prepare testing ends.
6/18/2013 1:10:36 PM -- Dispatching transactions begins ...
6/18/2013 1:10:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:47 PM -- Attaining prerequisites:
6/18/2013 1:12:17 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213207000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:18 PM -- Performance logging ends.
6/18/2013 3:14:07 PM -- JetInterop batch transaction stats: 40799, 40518, 40863, 40517 and 40635.
6/18/2013 3:14:07 PM -- Dispatching transactions ends.
6/18/2013 3:14:07 PM -- Shutting down databases ...
6/18/2013 3:14:08 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 3:14:08 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.blg has 485 samples.
6/18/2013 3:14:08 PM -- Creating test report ...
```

```
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:11 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.xml has 478 samples queried.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.html is saved.
6/18/2013 3:14:13 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:13 PM -- Verifying database checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:45 PM -- Verifying log checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_45.xml is saved.
6/18/2013 3:23:45 PM -- Jetstress testing ends.
6/18/2013 3:31:43 PM -- Jetstress testing begins ...
6/18/2013 3:31:43 PM -- Prepare testing begins ...
6/18/2013 3:31:48 PM -- Attaching databases ...
6/18/2013 3:31:48 PM -- Prepare testing ends.
6/18/2013 3:31:48 PM -- Dispatching transactions begins ...
6/18/2013 3:31:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:55 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:55 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:32:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:32:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:32:00 PM -- Attaining prerequisites:
6/18/2013 3:33:50 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215541000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:51 PM -- Performance logging ends.
6/18/2013 6:07:18 PM -- JetInterop batch transaction stats: 49701, 50075, 49817, 49657 and 50057.
6/18/2013 6:07:19 PM -- Dispatching transactions ends.
6/18/2013 6:07:19 PM -- Shutting down databases ...
6/18/2013 6:07:20 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 6:07:20 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.blg has 486 samples.
6/18/2013 6:07:20 PM -- Creating test report ...
6/18/2013 6:07:23 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:23 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.xml has 478 samples gueried
```

Server 2 – JS7

Test Summary

Overall Test Result	Pass
Machine Name	JS7
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:31:36 PM
Test End Time	6/18/2013 6:07:15 PM
Collection Start Time	6/18/2013 3:33:44 PM
Collection End Time	6/18/2013 5:33:34 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	952.202
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742397206528
Final Database Size (bytes)	10745920421888
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)				
Minimum Database Cache	160.0 MB				
Maximum Database Cache	1280.0 MB				
Insert Operations	40%				
Delete Operations	20%				
Replace Operations	5%				
Read Operations	35%				
Lazy Commits	70%				
Run Background Database Maintenance	True				
Number of Copies per Database	2				

Database Configuration

	3
Instance2224.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2224.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2224.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2224.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance2224.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	12.096	2.170	121.204	69.318	33612.996	36077.919	0.000	0.935	0.000	58.193	0.000	4751.344
Instance2224.2	12.048	2.274	120.959	69.242	33541.526	36091.079	0.000	0.934	0.000	58.256	0.000	4770.036
Instance2224.3	11.982	2.007	121.010	69.208	33487.600	36066.316	0.000	0.924	0.000	58.091	0.000	4756.329
Instance2224.4	11.748	2.145	122.047	69.717	33601.058	36076.251	0.000	0.936	0.000	58.372	0.000	4742.475
Instance2224.5	11.939	1.825	120.579	68.919	33696.311	36079.052	0.000	0.934	0.000	57.867	0.000	4751.034

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2224.1	31.263	261946.585
Instance2224.2	31.290	261930.654
Instance2224.3	31.303	261934.928
Instance2224.4	31.302	261947.024
Instance2224.5	31.454	261986.668

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance2224.1	1.124	232478.449
Instance2224.2	1.129	232545.009
Instance2224.3	1.124	232561.356
Instance2224.4	1.125	232428.491
Instance2224.5	1.118	232502.477

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	12.096	2.170	152.467	69.318	80432.674	36077.919	13.499	0.935	1.124	58.193	232478.449	4751.344
Instance2224.2	12.048	2.274	152.249	69.242	80479.340	36091.079	12.450	0.934	1.129	58.256	232545.009	4770.036
Instance2224.3	11.982	2.007	152.312	69.208	80437.011	36066.316	13.146	0.924	1.124	58.091	232561.356	4756.329
Instance2224.4	11.748	2.145	153.349	69.717	80212.197	36076.251	13.422	0.936	1.125	58.372	232428.491	4742.475
Instance2224.5	11.939	1.825	152.033	68.919	80927.726	36079.052	12.986	0.934	1.118	57.867	232502.477	4751.034

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.748	0.000	2.908
Available MBytes	28640.257	28505.000	28699.000
Free System Page Table Entries	33555673.898	33555610.000	33555676.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	89117321.887	89055232.000	89313280.000
Pool Paged Bytes	221075349.111	218812416.000	222027776.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:43 AM -- Jetstress testing begins ...
6/18/2013 10:56:43 AM -- Prepare testing begins ...
6/18/2013 10:56:49 AM -- Attaching databases ...
6/18/2013 10:56:49 AM -- Prepare testing ends.
6/18/2013 10:56:49 AM -- Dispatching transactions begins ...
6/18/2013 10:56:49 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:49 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:55 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:55 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:00 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:00 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:00 AM -- Attaining prerequisites:
6/18/2013 10:59:23 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212850000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:24 PM -- Performance logging ends.
6/18/2013 1:01:26 PM -- JetInterop batch transaction stats: 29643, 29265, 29554, 29573 and 29758.
6/18/2013 1:01:26 PM -- Dispatching transactions ends.
6/18/2013 1:01:26 PM -- Shutting down databases ...
6/18/2013 1:01:27 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 1:01:27 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.blg has 488 samples.
6/18/2013 1:01:27 PM -- Creating test report ...
6/18/2013 1:01:30 PM -- Instance2224.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:06 PM -- Instance2224.1 has 12.0 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:30 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:30 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.xml has 478 samples queried.
6/18/2013 1:01:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.html is saved.
6/18/2013 1:01:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:32 PM -- Verifying database checksums ...
6/18/2013 1:02:45 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:46 PM -- Verifying log checksums ...
6/18/2013 1:02:46 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_46.xml is saved.
6/18/2013 1:02:46 PM -- Jetstress testing ends.
6/18/2013 1:10:33 PM -- Jetstress testing begins ...
6/18/2013 1:10:33 PM -- Prepare testing begins ...
6/18/2013 1:10:39 PM -- Attaching databases ...
6/18/2013 1:10:39 PM -- Prepare testing ends.
6/18/2013 1:10:39 PM -- Dispatching transactions begins ...
6/18/2013 1:10:39 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:39 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:45 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:45 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:49 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:49 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:49 PM -- Attaining prerequisites:
6/18/2013 1:12:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214808000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:21 PM -- Performance logging ends.
6/18/2013 3:14:02 PM -- JetInterop batch transaction stats: 40566, 40795, 40522, 40949 and 40868.
6/18/2013 3:14:02 PM -- Dispatching transactions ends.
6/18/2013 3:14:02 PM -- Shutting down databases ...
6/18/2013 3:14:03 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 3:14:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.blg has 485 samples.
6/18/2013 3:14:03 PM -- Creating test report ...
```

```
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.xml has 478 samples gueried.
6/18/2013 3:14:07 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.html is saved.
6/18/2013 3:14:08 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:08 PM -- Verifying database checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:37 PM -- Verifying log checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_37.xml is saved.
6/18/2013 3:23:37 PM -- Jetstress testing ends.
6/18/2013 3:31:36 PM -- Jetstress testing begins ...
6/18/2013 3:31:36 PM -- Prepare testing begins ...
6/18/2013 3:31:42 PM -- Attaching databases ...
6/18/2013 3:31:42 PM -- Prepare testing ends.
6/18/2013 3:31:42 PM -- Dispatching transactions begins ...
6/18/2013 3:31:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:47 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:47 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:53 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:53 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:53 PM -- Attaining prerequisites:
6/18/2013 3:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215050000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:44 PM -- Performance logging ends.
6/18/2013 6:07:13 PM -- JetInterop batch transaction stats: 50126, 50577, 50218, 50339 and 50236.
6/18/2013 6:07:14 PM -- Dispatching transactions ends.
6/18/2013 6:07:14 PM -- Shutting down databases ...
6/18/2013 6:07:15 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 6:07:15 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.blg has 486 samples.
6/18/2013 6:07:15 PM -- Creating test report ...
6/18/2013 6:07:18 PM -- Instance2224.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:18 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.xml has 478 samples gueried.
```

Server 3 – JS8

Test Summary

Overall Test Result	Pass
Machine Name	JS8
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:31:24 PM
Test End Time	6/18/2013 6:07:03 PM
Collection Start Time	6/18/2013 3:33:25 PM
Collection End Time	6/18/2013 5:33:22 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	926.339
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742212657152
Final Database Size (bytes)	10745660375040
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3352.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3352.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3352.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3352.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3352.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	13.349	1.771	116.604	66.603	33484.602	36157.271	0.000	0.991	0.000	56.454	0.000	4758.984
Instance3352.2	11.728	1.774	118.439	67.780	33634.094	36151.206	0.000	0.987	0.000	56.718	0.000	4779.874
Instance3352.3	11.653	2.042	117.600	67.156	33704.757	36129.885	0.000	0.995	0.000	56.353	0.000	4790.841
Instance3352.4	11.782	2.383	118.160	67.651	33643.208	36139.614	0.000	0.994	0.000	56.855	0.000	4787.321
Instance3352.5	11.709	2.778	118.630	67.715	33695.019	36163.844	0.000	0.989	0.000	57.002	0.000	4784.483

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3352.1	31.276	261944.324
Instance3352.2	31.423	261948.592
Instance3352.3	31.386	261954.320
Instance3352.4	31.404	261935.199
Instance3352.5	31.472	261977.343

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3352.1	1.093	232534.183
Instance3352.2	1.102	232541.988
Instance3352.3	1.099	232000.969
Instance3352.4	1.108	232546.313
Instance3352.5	1.111	232558.264

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	13.349	1.771	147.880	66.603	81802.898	36157.271	13.665	0.991	1.093	56.454	232534.183	4758.984
Instance3352.2	11.728	1.774	149.863	67.780	81507.251	36151.206	14.092	0.987	1.102	56.718	232541.988	4779.874
Instance3352.3	11.653	2.042	148.987	67.156	81789.141	36129.885	13.345	0.995	1.099	56.353	232000.969	4790.841
Instance3352.4	11.782	2.383	149.564	67.651	81578.152	36139.614	13.611	0.994	1.108	56.855	232546.313	4787.321
Instance3352.5	11.709	2.778	150.102	67.715	81558.647	36163.844	13.562	0.989	1.111	57.002	232558.264	4784.483

Host System Performance

Counter	Average	Minimum	Maximum	
% Processor Time	0.735	0.000	2.019	
Available MBytes	28629.915	28494.000	28751.000	
Free System Page Table Entries	33555672.881	33555611.000	33555675.000	
Transition Pages RePurposed/sec	0.000	0.000	0.000	
Pool Nonpaged Bytes	91226043.733	91205632.000	91287552.000	
Pool Paged Bytes	232419302.400	229572608.000	233148416.000	
Database Page Fault Stalls/sec	0.000	0.000	0.000	

Test Log

```
6/18/2013 10:56:47 AM -- Jetstress testing begins ...
6/18/2013 10:56:47 AM -- Prepare testing begins ...
6/18/2013 10:56:53 AM -- Attaching databases ...
6/18/2013 10:56:53 AM -- Prepare testing ends.
6/18/2013 10:56:53 AM -- Dispatching transactions begins ...
6/18/2013 10:56:53 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:53 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:59 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:59 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:05 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:05 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:05 AM -- Attaining prerequisites:
6/18/2013 10:59:35 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1219310000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:36 PM -- Performance logging ends.
6/18/2013 1:01:30 PM -- JetInterop batch transaction stats: 28755, 28320, 28835, 28726 and 28827.
6/18/2013 1:01:30 PM -- Dispatching transactions ends.
6/18/2013 1:01:30 PM -- Shutting down databases ...
6/18/2013 1:01:32 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 1:01:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.blg has 489 samples.
6/18/2013 1:01:32 PM -- Creating test report ...
6/18/2013 1:01:35 PM -- Instance3352.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:01 PM -- Instance3352.1 has 13.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.xml has 479 samples queried.
6/18/2013 1:01:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.html is saved.
6/18/2013 1:01:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:37 PM -- Verifying database checksums ...
6/18/2013 1:02:50 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:51 PM -- Verifying log checksums ...
6/18/2013 1:02:51 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 2 51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 13 2 51.xml is saved.
6/18/2013 1:02:51 PM -- Jetstress testing ends.
6/18/2013 1:10:36 PM -- Jetstress testing begins ...
6/18/2013 1:10:36 PM -- Prepare testing begins ...
6/18/2013 1:10:42 PM -- Attaching databases ...
6/18/2013 1:10:42 PM -- Prepare testing ends.
6/18/2013 1:10:42 PM -- Dispatching transactions begins ...
6/18/2013 1:10:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:48 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:48 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:52 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:52 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:52 PM -- Attaining prerequisites:
6/18/2013 1:12:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214845000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:56 PM -- JetInterop batch transaction stats: 39626, 39706, 39573, 39658 and 39994.
6/18/2013 3:13:56 PM -- Dispatching transactions ends.
6/18/2013 3:13:56 PM -- Shutting down databases ...
6/18/2013 3:13:58 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 3:13:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.blg has 485 samples.
6/18/2013 3:13:58 PM -- Creating test report ...
```

```
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.xml has 478 samples queried.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.html is saved.
6/18/2013 3:14:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:02 PM -- Verifying database checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:26 PM -- Verifying log checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_26.xml is saved.
6/18/2013 3:23:26 PM -- Jetstress testing ends.
6/18/2013 3:31:24 PM -- Jetstress testing begins ...
6/18/2013 3:31:24 PM -- Prepare testing begins ...
6/18/2013 3:31:30 PM -- Attaching databases ...
6/18/2013 3:31:30 PM -- Prepare testing ends.
6/18/2013 3:31:30 PM -- Dispatching transactions begins ...
6/18/2013 3:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

6/18/2013 3:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).

```
6/18/2013 3:31:41 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:41 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:41 PM -- Attaining prerequisites:
6/18/2013 3:33:25 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211384000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:25 PM -- Performance logging ends.
6/18/2013 6:07:01 PM -- JetInterop batch transaction stats: 49011, 49241, 49179, 49282 and 49742.
6/18/2013 6:07:01 PM -- Dispatching transactions ends.
6/18/2013 6:07:01 PM -- Shutting down databases ...
6/18/2013 6:07:03 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 6:07:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.blg has 486 samples.
6/18/2013 6:07:03 PM -- Creating test report ...
6/18/2013 6:07:06 PM -- Instance3352.1 has 13.3 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.xml has 479 samples gueried.
```

Server 4 – JS9

Test Summary

Overall Test Result	Pass
Machine Name	JS9
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:31:19 PM
Test End Time	6/18/2013 6:06:53 PM
Collection Start Time	6/18/2013 3:33:21 PM
Collection End Time	6/18/2013 5:33:17 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	937.845
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742237822976
Final Database Size (bytes)	10745710706688
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance1424.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance1424.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance1424.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance1424.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance1424.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	13.427	1.765	119.345	68.199	33399.369	36104.505	0.000	0.989	0.000	57.485	0.000	4737.746
Instance1424.2	11.636	1.782	118.254	67.651	33670.259	36114.732	0.000	0.990	0.000	56.908	0.000	4772.014
Instance1424.3	11.681	1.998	120.786	68.977	33533.382	36122.249	0.000	0.989	0.000	57.583	0.000	4748.654
Instance1424.4	11.707	2.361	119.675	68.414	33607.835	36134.784	0.000	0.984	0.000	57.405	0.000	4762.088
Instance1424.5	11.622	2.768	118.807	67.738	33578.365	36122.034	0.000	0.989	0.000	56.742	0.000	4763.378

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance1424.1	31.137	261929.468
Instance1424.2	31.461	261970.599
Instance1424.3	31.430	261979.505
Instance1424.4	31.456	261959.406
Instance1424.5	31.426	261935.120

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance1424.1	1.108	232555.875
Instance1424.2	1.105	232434.044
Instance1424.3	1.110	232534.514
Instance1424.4	1.112	232546.896
Instance1424.5	1.100	232461.785

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	13.427	1.765	150.481	68.199	80685.477	36104.505	13.674	0.989	1.108	57.485	232555.875	4737.746
Instance1424.2	11.636	1.782	149.715	67.651	81644.762	36114.732	14.213	0.990	1.105	56.908	232434.044	4772.014
Instance1424.3	11.681	1.998	152.216	68.977	80704.156	36122.249	13.354	0.989	1.110	57.583	232534.514	4748.654
Instance1424.4	11.707	2.361	151.132	68.414	81136.787	36134.784	13.361	0.984	1.112	57.405	232546.896	4762.088
Instance1424.5	11.622	2.768	150.233	67.738	81346.641	36122.034	14.186	0.989	1.100	56.742	232461.785	4763.378

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.702	0.000	2.850
Available MBytes	28624.453	28618.000	28638.000
Free System Page Table Entries	33555673.885	33555612.000	33555676.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	81811520.134	81801216.000	81862656.000
Pool Paged Bytes	230923364.476	228913152.000	232103936.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:51 AM -- Jetstress testing begins ...
6/18/2013 10:56:51 AM -- Prepare testing begins ...
6/18/2013 10:56:58 AM -- Attaching databases ...
6/18/2013 10:56:58 AM -- Prepare testing ends.
6/18/2013 10:56:58 AM -- Dispatching transactions begins ...
6/18/2013 10:56:58 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:58 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:04 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:04 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:08 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:08 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:08 AM -- Attaining prerequisites:
6/18/2013 10:59:41 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209700000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:28 PM -- JetInterop batch transaction stats: 28950, 29007, 29113, 28462 and 29068.
6/18/2013 1:01:28 PM -- Dispatching transactions ends.
6/18/2013 1:01:28 PM -- Shutting down databases ...
6/18/2013 1:01:30 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.blg has 489 samples.
6/18/2013 1:01:30 PM -- Creating test report ...
6/18/2013 1:01:34 PM -- Instance1424.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:56 PM -- Instance1424.1 has 13.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.xml has 478 samples queried.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.html is saved.
6/18/2013 1:01:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:35 PM -- Verifying database checksums ...
6/18/2013 1:02:54 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:55 PM -- Verifying log checksums ...
6/18/2013 1:02:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_55.xml is saved.
6/18/2013 1:02:55 PM -- Jetstress testing ends.
6/18/2013 1:10:38 PM -- Jetstress testing begins ...
6/18/2013 1:10:38 PM -- Prepare testing begins ...
6/18/2013 1:10:44 PM -- Attaching databases ...
6/18/2013 1:10:44 PM -- Prepare testing ends.
6/18/2013 1:10:44 PM -- Dispatching transactions begins ...
6/18/2013 1:10:44 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:44 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:50 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:50 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:55 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:55 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:55 PM -- Attaining prerequisites:
6/18/2013 1:12:32 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1218224000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:51 PM -- JetInterop batch transaction stats: 40165, 40015, 39927, 39446 and 40003.
6/18/2013 3:13:51 PM -- Dispatching transactions ends.
6/18/2013 3:13:51 PM -- Shutting down databases ...
6/18/2013 3:13:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 3:13:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.blg has 485 samples.
6/18/2013 3:13:53 PM -- Creating test report ...
```

```
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.xml has 478 samples gueried.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.html is saved.
6/18/2013 3:13:57 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:57 PM -- Verifying database checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:23:18 PM -- Verifying log checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_18.xml is saved.
6/18/2013 3:23:18 PM -- Jetstress testing ends.
6/18/2013 3:31:19 PM -- Jetstress testing begins ...
6/18/2013 3:31:19 PM -- Prepare testing begins ...
6/18/2013 3:31:24 PM -- Attaching databases ...
6/18/2013 3:31:24 PM -- Prepare testing ends.
6/18/2013 3:31:24 PM -- Dispatching transactions begins ...
6/18/2013 3:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:35 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:35 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:35 PM -- Attaining prerequisites:
6/18/2013 3:33:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211597000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:21 PM -- Performance logging ends.
6/18/2013 6:06:51 PM -- JetInterop batch transaction stats: 49885, 49854, 49826, 49630 and 49416.
6/18/2013 6:06:51 PM -- Dispatching transactions ends.
6/18/2013 6:06:51 PM -- Shutting down databases ...
6/18/2013 6:06:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 6:06:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.blg has 486 samples.
6/18/2013 6:06:53 PM -- Creating test report ...
6/18/2013 6:06:56 PM -- Instance1424.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.xml has 478 samples gueried.
5/14/2013 10:37:27 AM -- Performance logging begins (interval: 30000 ms).
5/14/2013 10:37:27 AM -- Verifying database checksums ...
5/14/2013 10:37:39 AM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed) and C:\DB\DB4 (0% processed)
5/14/2013 10:37:39 AM -- Verifying log checksums ...
5/14/2013 10:37:39 AM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed) and C:\DB\DB4 (0 log(s) processed)
5/14/2013 10:37:39 AM -- C:\Program Files\Exchange Jetstress\Application_2013_5_14_10_37_39.evt is saved.
```

```
5/14/2013 10:37:39 AM -- C:\Program Files\Exchange Jetstress\System_2013_5_14_10_37_39.evt is saved.
5/14/2013 10:37:39 AM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_5_14_10_37_39.xml is saved.
5/14/2013 10:37:39 AM -- Jetstress testing ends.
5/14/2013 1:17:15 PM -- Jetstress testing begins ...
5/14/2013 1:17:15 PM -- Prepare testing begins ...
5/14/2013 1:17:19 PM -- Attaching databases ...
5/14/2013 1:17:19 PM -- Prepare testing ends.
5/14/2013 1:17:19 PM -- Dispatching transactions begins ...
5/14/2013 1:17:19 PM -- Database cache settings: (minimum: 128.0 MB, maximum: 1.0 GB)
5/14/2013 1:17:19 PM -- Database flush thresholds: (start: 10.2 MB, stop: 20.5 MB)
5/14/2013 1:17:24 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
5/14/2013 1:17:24 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
5/14/2013 1:17:29 PM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
5/14/2013 1:17:29 PM -- Performance logging begins (interval: 15000 ms).
5/14/2013 1:17:29 PM -- Attaining prerequisites:
5/14/2013 1:20:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 971599900.0 (lower bound: 966367600.0, upper bound: none)
5/14/2013 3:20:22 PM -- Performance logging ends.
5/15/2013 9:17:15 AM -- JetInterop batch transaction stats: 232394, 232238, 232466 and 232701.
5/15/2013 9:17:15 AM -- Dispatching transactions ends.
5/15/2013 9:17:15 AM -- Shutting down databases ...
5/15/2013 9:17:17 AM -- Instance3940.1 (complete), Instance3940.2 (complete), Instance3940.3 (complete) and Instance3940.4 (complete)
5/15/2013 9:17:17 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 5 14 13 17 24.blg has 490 samples.
5/15/2013 9:17:17 AM -- Creating test report ...
5/15/2013 9:17:20 AM -- Instance3940.1 has 10.5 for I/O Database Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.1 has 0.9 for I/O Log Writes Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.1 has 0.9 for I/O Log Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.2 has 10.7 for I/O Database Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.2 has 0.9 for I/O Log Writes Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.2 has 0.9 for I/O Log Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.3 has 10.7 for I/O Database Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.3 has 0.9 for I/O Log Writes Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.3 has 0.9 for I/O Log Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.4 has 11.2 for I/O Database Reads Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.4 has 0.9 for I/O Log Writes Average Latency.
5/15/2013 9:17:20 AM -- Instance3940.4 has 0.9 for I/O Log Reads Average Latency.
5/15/2013 9:17:20 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
5/15/2013 9:17:20 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

5/15/2013 9:17:20 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_5_14_13_17_24.xml has 478 samples queried.

Server 5 – JS10

Test Summary

Overall Test Result	Pass						
Machine Name	JS10						
Test Description	5000 users/server						
	10 servers						
	2GB mailboxes .15 IOPS/user						
	.18 IOPS tested						
	5 dbs per server						
	2200GB db/log combined volumes						
	2 copies						
	5 threads/db						
Test Start Time	6/18/2013 3:31:10 PM						
Test End Time	6/18/2013 6:06:58 PM						
Collection Start Time	6/18/2013 3:33:07 PM						
Collection End Time	6/18/2013 5:33:07 PM						
Jetstress Version	14.01.0180.003						
Ese Version	14.03.0123.002						
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)						
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.blg						

Database Sizing and Throughput

Achieved Transactional I/O per Second	936.855
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742288154624
Final Database Size (bytes)	10745761038336
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

	3
Instance3992.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3992.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3992.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3992.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3992.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	13.231	2.087	119.955	68.469	33455.032	36083.123	0.000	0.941	0.000	57.767	0.000	4709.283
Instance3992.2	11.664	1.932	119.108	68.103	33668.220	36056.645	0.000	0.942	0.000	57.286	0.000	4781.004
Instance3992.3	11.656	1.927	120.052	68.633	33654.939	36115.475	0.000	0.941	0.000	57.619	0.000	4773.888
Instance3992.4	11.582	1.765	118.530	67.746	33621.474	36138.305	0.000	0.939	0.000	57.312	0.000	4765.001
Instance3992.5	11.637	1.631	118.589	67.672	33588.248	36118.108	0.000	0.941	0.000	56.807	0.000	4770.246

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3992.1	31.442	261979.235
Instance3992.2	31.513	261983.273
Instance3992.3	31.435	261968.835
Instance3992.4	31.439	261918.081
Instance3992.5	31.475	261962.162

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3992.1	1.106	232511.403
Instance3992.2	1.112	232528.066
Instance3992.3	1.119	232471.908
Instance3992.4	1.112	232551.020
Instance3992.5	1.103	232522.559

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	13.231	2.087	151.396	68.469	80914.434	36083.123	14.445	0.941	1.106	57.767	232511.403	4709.283
Instance3992.2	11.664	1.932	150.621	68.103	81436.386	36056.645	13.507	0.942	1.112	57.286	232528.066	4781.004
Instance3992.3	11.656	1.927	151.486	68.633	81031.830	36115.475	13.078	0.941	1.119	57.619	232471.908	4773.888
Instance3992.4	11.582	1.765	149.969	67.746	81480.936	36138.305	13.125	0.939	1.112	57.312	232551.020	4765.001
Instance3992.5	11.637	1.631	150.064	67.672	81487.957	36118.108	13.058	0.941	1.103	56.807	232522.559	4770.246

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.727	0.000	2.867
Available MBytes	60037.244	60029.000	60145.000
Free System Page Table Entries	33555673.896	33555612.000	33555676.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74219434.667	74203136.000	74321920.000
Pool Paged Bytes	223109794.133	220717056.000	223698944.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:54 AM -- Jetstress testing begins ...
6/18/2013 10:56:54 AM -- Prepare testing begins ...
6/18/2013 10:56:59 AM -- Attaching databases ...
6/18/2013 10:58:21 AM -- Jetstress testing begins ...
6/18/2013 10:58:21 AM -- Prepare testing begins ...
6/18/2013 10:58:26 AM -- Attaching databases ...
6/18/2013 10:58:26 AM -- Prepare testing ends.
6/18/2013 10:58:26 AM -- Dispatching transactions begins ...
6/18/2013 10:58:27 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:58:27 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:58:33 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:58:33 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:58:37 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:58:37 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:58:37 AM -- Attaining prerequisites:
6/18/2013 11:01:19 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213768000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:01:20 PM -- Performance logging ends.
6/18/2013 1:01:33 PM -- JetInterop batch transaction stats: 28554, 28934, 28713, 28744 and 28609.
6/18/2013 1:01:33 PM -- Dispatching transactions ends.
6/18/2013 1:01:33 PM -- Shutting down databases ...
6/18/2013 1:01:34 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.blg has 490 samples.
6/18/2013 1:01:34 PM -- Creating test report ...
6/18/2013 1:01:38 PM -- Instance3992.1 has 9.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 8.6 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 8.5 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
```

```
6/18/2013 1:01:38 PM -- Instance3992.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:38 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.xml has 479 samples gueried.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance 2013_6_18_10_58_33.html is saved.
6/18/2013 1:01:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:39 PM -- Verifying database checksums ...
6/18/2013 1:03:07 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:08 PM -- Verifying log checksums ...
6/18/2013 1:03:08 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 13 3 8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_8.xml is saved.
6/18/2013 1:03:08 PM -- Jetstress testing ends.
6/18/2013 1:10:42 PM -- Jetstress testing begins ...
6/18/2013 1:10:42 PM -- Prepare testing begins ...
6/18/2013 1:10:48 PM -- Attaching databases ...
6/18/2013 1:10:48 PM -- Prepare testing ends.
6/18/2013 1:10:48 PM -- Dispatching transactions begins ...
6/18/2013 1:10:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:54 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:54 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:00 PM -- Attaining prerequisites:
6/18/2013 1:12:42 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214091000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:42 PM -- Performance logging ends.
6/18/2013 3:13:44 PM -- JetInterop batch transaction stats: 39666, 39743, 39580, 39429 and 39791.
6/18/2013 3:13:45 PM -- Dispatching transactions ends.
6/18/2013 3:13:45 PM -- Shutting down databases ...
6/18/2013 3:13:46 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
```

```
6/18/2013 3:13:46 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.blg has 486 samples.
6/18/2013 3:13:46 PM -- Creating test report ...
6/18/2013 3:13:49 PM -- Instance3992.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:49 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.xml has 479 samples queried.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.html is saved.
6/18/2013 3:13:50 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:50 PM -- Verifying database checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:02 PM -- Verifying log checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_2.xml is saved.
6/18/2013 3:23:02 PM -- Jetstress testing ends.
6/18/2013 3:31:10 PM -- Jetstress testing begins ...
6/18/2013 3:31:10 PM -- Prepare testing begins ...
6/18/2013 3:31:15 PM -- Attaching databases ...
6/18/2013 3:31:15 PM -- Prepare testing ends.
6/18/2013 3:31:15 PM -- Dispatching transactions begins ...
```

```
6/18/2013 3:31:15 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:15 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:21 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:21 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:26 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:26 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:26 PM -- Attaining prerequisites:
6/18/2013 3:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212715000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:08 PM -- Performance logging ends.
6/18/2013 6:06:56 PM -- JetInterop batch transaction stats: 49468, 49617, 50081, 49679 and 49649.
6/18/2013 6:06:56 PM -- Dispatching transactions ends.
6/18/2013 6:06:56 PM -- Shutting down databases ...
6/18/2013 6:06:58 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 6:06:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.blg has 486 samples.
6/18/2013 6:06:58 PM -- Creating test report ...
6/18/2013 6:07:01 PM -- Instance3992.1 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 21.xml has 479 samples gueried
```

Server 6 – JS11

Test Summary

Overall Test Result	Pass
Machine Name	JS11
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:31:03 PM
Test End Time	6/18/2013 6:06:47 PM
Collection Start Time	6/18/2013 3:33:00 PM
Collection End Time	6/18/2013 5:32:46 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	904.996
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742195879936
Final Database Size (bytes)	10745559711744
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance304.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance304.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance304.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance304.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance304.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3940.1	10.457	2.094	67.573	40.812	34875.572	36239.323	0.000	0.932	0.000	35.817	0.000	4651.020
Instance3940.2	10.687	2.123	67.525	40.574	34895.265	36291.749	0.000	0.931	0.000	36.127	0.000	4662.157
Instance3940.3	10.733	2.005	68.360	41.240	34996.496	36265.414	0.000	0.932	0.000	36.339	0.000	4604.691
Instance3940.4	11.208	1.940	68.744	41.462	34842.908	36307.542	0.000	0.927	0.000	36.177	0.000	4605.769

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance304.1	31.509	261961.412
Instance304.2	31.458	261951.310
Instance304.3	31.486	262005.352
Instance304.4	31.460	261971.042
Instance304.5	31.493	261967.076

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance304.1	1.080	232483.067
Instance304.2	1.074	232493.825
Instance304.3	1.070	232508.434
Instance304.4	1.075	232561.713
Instance304.5	1.077	232506.935

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency	I/O Database Writes Average Latency	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
I7044	(msec)	(msec)	146 400	CE 70E	00774 467	76457047	14075	0.047	1.000	EE COC	272407.067	4764 005
Instance304.1	12.314	2.253	146.422	65.725	82731.463	36153.243	14.275	0.943	1.080	55.696	232483.067	4764.895
Instance304.2	12.270	2.121	146.243	65.567	82673.283	36144.756	13.759	0.946	1.074	55.601	232493.825	4745.618
Instance304.3	12.225	2.104	147.038	66.131	82511.473	36123.129	13.344	0.943	1.070	55.800	232508.434	4727.088
Instance304.4	12.389	1.953	146.678	65.832	82574.221	36139.727	13.927	0.940	1.075	55.596	232561.713	4757.629
Instance304.5	12.515	1.776	146.876	65.889	82538.540	36173.430	13.235	0.945	1.077	55.878	232506.935	4739.882

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.674	0.000	2.851
Available MBytes	60064.530	59935.000	60165.000
Free System Page Table Entries	33555160.775	33555099.000	33555163.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	72919745.470	72900608.000	72974336.000
Pool Paged Bytes	225378611.841	222953472.000	226357248.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:56 AM -- Jetstress testing begins ...
6/18/2013 10:56:56 AM -- Prepare testing begins ...
6/18/2013 10:57:02 AM -- Attaching databases ...
6/18/2013 10:57:02 AM -- Prepare testing ends.
6/18/2013 10:57:02 AM -- Dispatching transactions begins ...
6/18/2013 10:57:02 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:02 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:08 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:08 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:12 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:12 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:12 AM -- Attaining prerequisites:
6/18/2013 10:59:40 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208623000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:35 PM -- JetInterop batch transaction stats: 28514, 28772, 28603, 28860 and 28659.
6/18/2013 1:01:36 PM -- Dispatching transactions ends.
6/18/2013 1:01:36 PM -- Shutting down databases ...
6/18/2013 1:01:37 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 1:01:37 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.blg has 489 samples.
6/18/2013 1:01:37 PM -- Creating test report ...
6/18/2013 1:01:40 PM -- Instance304.1 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:43 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:40 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:40 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:40 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.xml has 479 samples queried.
6/18/2013 1:01:41 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.html is saved.
6/18/2013 1:01:42 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:42 PM -- Verifying database checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:12 PM -- Verifying log checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_12.xml is saved.
6/18/2013 1:03:12 PM -- Jetstress testing ends.
6/18/2013 1:10:46 PM -- Jetstress testing begins ...
6/18/2013 1:10:46 PM -- Prepare testing begins ...
6/18/2013 1:10:51 PM -- Attaching databases ...
6/18/2013 1:10:51 PM -- Prepare testing ends.
6/18/2013 1:10:51 PM -- Dispatching transactions begins ...
6/18/2013 1:10:51 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:51 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:57 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:57 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:02 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:02 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:02 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212584000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:38 PM -- JetInterop batch transaction stats: 38646, 38442, 38663, 38712 and 38705.
6/18/2013 3:13:38 PM -- Dispatching transactions ends.
6/18/2013 3:13:38 PM -- Shutting down databases ...
6/18/2013 3:13:39 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.blg has 486 samples.
6/18/2013 3:13:39 PM -- Creating test report ...
```

```
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.xml has 478 samples queried.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.html is saved.
6/18/2013 3:13:44 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:44 PM -- Verifying database checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (3% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:22:55 PM -- Verifying log checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_22_55.xml is saved.
6/18/2013 3:22:55 PM -- Jetstress testing ends.
6/18/2013 3:31:03 PM -- Jetstress testing begins ...
6/18/2013 3:31:03 PM -- Prepare testing begins ...
6/18/2013 3:31:09 PM -- Attaching databases ...
6/18/2013 3:31:09 PM -- Prepare testing ends.
6/18/2013 3:31:09 PM -- Dispatching transactions begins ...
6/18/2013 3:31:09 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:09 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:15 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:15 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:20 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:20 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:20 PM -- Attaining prerequisites:
6/18/2013 3:33:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210692000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:01 PM -- Performance logging ends.
6/18/2013 6:06:46 PM -- JetInterop batch transaction stats: 47895, 47739, 48183, 48056 and 48255.
6/18/2013 6:06:46 PM -- Dispatching transactions ends.
6/18/2013 6:06:46 PM -- Shutting down databases ...
6/18/2013 6:06:47 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.blg has 485 samples.
6/18/2013 6:06:47 PM -- Creating test report ...
6/18/2013 6:06:50 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.xml has 478 samples gueried.
```

Server 7 – JS12

Test Summary

Overall Test Result	Pass
Machine Name	JS12
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:30:58 PM
Test End Time	6/18/2013 6:06:44 PM
Collection Start Time	6/18/2013 3:32:58 PM
Collection End Time	6/18/2013 5:32:56 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	850.905
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10741927444480
Final Database Size (bytes)	10745106726912
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3984.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb					
Instance3984.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb					
Instance3984.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb					
Instance3984.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb					
Instance3984.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb					

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3984.1	12.723	2.233	107.498	61.368	33653.958	36194.138	0.000	0.957	0.000	52.309	0.000	4728.100
Instance3984.2	12.865	2.103	108.883	62.242	33694.185	36228.048	0.000	0.955	0.000	53.087	0.000	4717.587
Instance3984.3	13.011	2.083	108.472	61.903	33681.252	36228.858	0.000	0.955	0.000	52.973	0.000	4734.205
Instance3984.4	12.920	1.939	107.794	61.716	33766.922	36255.371	0.000	0.956	0.000	52.907	0.000	4774.048
Instance3984.5	13.160	1.762	108.864	62.163	33612.853	36256.098	0.000	0.952	0.000	52.990	0.000	4722.485

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3984.1	31.548	261974.080
Instance3984.2	31.482	261969.224
Instance3984.3	31.409	261933.347
Instance3984.4	31.371	261954.070
Instance3984.5	31.462	261955.927

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3984.1	1.004	232450.657
Instance3984.2	1.018	232546.696
Instance3984.3	1.021	232539.939
Instance3984.4	1.026	232560.316
Instance3984.5	1.018	232518.802

Total I/O Performance

MSExchange Database ==>	I/O Database	I/O Database	I/O Database	I/O Database	I/O Database Reads Average	I/O Database Writes Average	I/O Log Reads	I/O Log Writes	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes
Instances	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Bytes	Bytes	Average Latency (msec)	Average Latency (msec)	Reaus/sec	Writes/sec	Average bytes	Average Bytes
Instance3984.1	12.723	2.233	139.047	61.368	85457.422	36194.138	13.690	0.957	1.004	52.309	232450.657	4728.100
Instance3984.2	12.865	2.103	140.365	62.242	84893.645	36228.048	13.391	0.955	1.018	53.087	232546.696	4717.587
Instance3984.3	13.011	2.083	139.881	61.903	84932.759	36228.858	12.994	0.955	1.021	52.973	232539.939	4734.205
Instance3984.4	12.920	1.939	139.165	61.716	85204.935	36255.371	13.890	0.956	1.026	52.907	232560.316	4774.048
Instance3984.5	13.160	1.762	140.326	62.163	84808.933	36256.098	13.910	0.952	1.018	52.990	232518.802	4722.485

Host System Performance

Counter	Average	Minimum	Maximum	
% Processor Time	0.746	0.000	3.189	
Available MBytes	60054.913	59939.000	60176.000	
Free System Page Table Entries	33555162.019	33555100.000	33555164.000	
Transition Pages RePurposed/sec	0.000	0.000	0.000	
Pool Nonpaged Bytes	74969796.267	74956800.000	75030528.000	
Pool Paged Bytes	225907874.133	223952896.000	227053568.000	
Database Page Fault Stalls/sec	0.000	0.000	0.000	

Test Log

```
6/18/2013 10:56:58 AM -- Jetstress testing begins ...
6/18/2013 10:56:58 AM -- Prepare testing begins ...
6/18/2013 10:57:04 AM -- Attaching databases ...
6/18/2013 10:57:04 AM -- Prepare testing ends.
6/18/2013 10:57:04 AM -- Dispatching transactions begins ...
6/18/2013 10:57:04 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:04 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:10 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:10 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:15 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:15 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:15 AM -- Attaining prerequisites:
6/18/2013 10:59:55 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211769000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:56 PM -- Performance logging ends.
6/18/2013 1:01:38 PM -- JetInterop batch transaction stats: 27473, 27301, 27492, 27469 and 27372.
6/18/2013 1:01:38 PM -- Dispatching transactions ends.
6/18/2013 1:01:38 PM -- Shutting down databases ...
6/18/2013 1:01:39 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 1:01:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.blg has 489 samples.
6/18/2013 1:01:39 PM -- Creating test report ...
6/18/2013 1:01:43 PM -- Instance3984.1 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance 3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 9.4 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:39 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.xml has 478 samples queried.
6/18/2013 1:01:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.html is saved.
6/18/2013 1:01:45 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:45 PM -- Verifying database checksums ...
6/18/2013 1:03:15 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:16 PM -- Verifying log checksums ...
6/18/2013 1:03:16 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_16.xml is saved.
6/18/2013 1:03:16 PM -- Jetstress testing ends.
6/18/2013 1:10:48 PM -- Jetstress testing begins ...
6/18/2013 1:10:48 PM -- Prepare testing begins ...
6/18/2013 1:10:54 PM -- Attaching databases ...
6/18/2013 1:10:54 PM -- Prepare testing ends.
6/18/2013 1:10:54 PM -- Dispatching transactions begins ...
6/18/2013 1:10:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:05 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214104000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:34 PM -- JetInterop batch transaction stats: 36569, 36311, 36550, 36376 and 36492.
6/18/2013 3:13:35 PM -- Dispatching transactions ends.
6/18/2013 3:13:35 PM -- Shutting down databases ...
6/18/2013 3:13:36 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.blg has 486 samples.
6/18/2013 3:13:36 PM -- Creating test report ...
```

```
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:39 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.xml has 478 samples queried.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.html is saved.
6/18/2013 3:13:40 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:40 PM -- Verifying database checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:19:38 PM -- Verifying log checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_38.xml is saved.
6/18/2013 3:19:38 PM -- Jetstress testing ends.
6/18/2013 3:30:58 PM -- Jetstress testing begins ...
6/18/2013 3:30:58 PM -- Prepare testing begins ...
6/18/2013 3:31:04 PM -- Attaching databases ...
6/18/2013 3:31:04 PM -- Prepare testing ends.
6/18/2013 3:31:04 PM -- Dispatching transactions begins ...
6/18/2013 3:31:04 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:04 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:10 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

6/18/2013 3:31:10 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).

```
6/18/2013 3:31:15 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:15 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:15 PM -- Attaining prerequisites:
6/18/2013 3:32:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208979000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:59 PM -- Performance logging ends.
6/18/2013 6:06:42 PM -- JetInterop batch transaction stats: 44967, 45509, 45269, 45388 and 45393.
6/18/2013 6:06:42 PM -- Dispatching transactions ends.
6/18/2013 6:06:42 PM -- Shutting down databases ...
6/18/2013 6:06:44 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 6:06:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.blg has 486 samples.
6/18/2013 6:06:44 PM -- Creating test report ...
6/18/2013 6:06:47 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.xml has 479 samples gueried.
```

Server 8 – JS13

Test Summary

Overall Test Result	Pass
Machine Name	JS13
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:30:54 PM
Test End Time	6/18/2013 6:06:38 PM
Collection Start Time	6/18/2013 3:32:38 PM
Collection End Time	6/18/2013 5:32:37 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	905.909
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742221045760
Final Database Size (bytes)	10745593266176
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance376.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb							
Instance376.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb							
Instance376.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb							
Instance376.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb							
Instance376.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb							

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	12.846	2.094	116.068	66.300	33467.774	36099.904	0.000	0.934	0.000	56.416	0.000	4705.892
Instance376.2	12.305	1.970	114.025	65.146	33795.061	36120.398	0.000	0.935	0.000	55.451	0.000	4736.850
Instance376.3	12.381	1.942	116.333	66.464	33561.983	36099.565	0.000	0.938	0.000	55.819	0.000	4709.350
Instance376.4	11.941	1.778	115.791	66.227	33535.063	36181.606	0.000	0.936	0.000	56.533	0.000	4760.367
Instance376.5	12.004	1.668	114.283	65.272	33679.642	36142.079	0.000	0.935	0.000	55.152	0.000	4737.775

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance376.1	31.378	261925.847
Instance376.2	31.426	261961.130
Instance376.3	31.332	261959.031
Instance376.4	31.467	261970.335
Instance376.5	31.552	261986.076

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance376.1	1.078	232530.825
Instance376.2	1.068	232504.299
Instance376.3	1.068	232510.317
Instance376.4	1.096	232514.711
Instance376.5	1.063	232484.174

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	12.846	2.094	147.445	66.300	82085.827	36099.904	13.505	0.934	1.078	56.416	232530.825	4705.892
Instance376.2	12.305	1.970	145.451	65.146	83092.147	36120.398	13.399	0.935	1.068	55.451	232504.299	4736.850
Instance376.3	12.381	1.942	147.665	66.464	82024.400	36099.565	13.260	0.938	1.068	55.819	232510.317	4709.350
Instance376.4	11.941	1.778	147.258	66.227	82348.069	36181.606	14.040	0.936	1.096	56.533	232514.711	4760.367
Instance376.5	12.004	1.668	145.835	65.272	83074.890	36142.079	13.342	0.935	1.063	55.152	232484.174	4737.775

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.698	0.000	3.049
Available MBytes	60032.860	60016.000	60133.000
Free System Page Table Entries	33555162.071	33555162.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	76894890.667	76886016.000	76943360.000
Pool Paged Bytes	226659592.533	224256000.000	227246080.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 1:10:51 PM -- Jetstress testing begins ...
6/18/2013 1:10:51 PM -- Prepare testing begins ...
6/18/2013 1:10:56 PM -- Attaching databases ...
6/18/2013 1:10:56 PM -- Prepare testing ends.
6/18/2013 1:10:56 PM -- Dispatching transactions begins ...
6/18/2013 1:10:56 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:56 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:02 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:02 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:08 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:08 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:08 PM -- Attaining prerequisites:
6/18/2013 1:12:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212314000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:59 PM -- Performance logging ends.
6/18/2013 3:13:31 PM -- JetInterop batch transaction stats: 38705, 38814, 39021, 38453 and 38697.
6/18/2013 3:13:31 PM -- Dispatching transactions ends.
6/18/2013 3:13:31 PM -- Shutting down databases ...
6/18/2013 3:13:32 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 3:13:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.blg has 486 samples.
6/18/2013 3:13:32 PM -- Creating test report ...
6/18/2013 3:13:35 PM -- Instance376.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Reads Average Latency.
```

```
6/18/2013 3:13:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.xml has 478 samples queried.
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.html is saved.
6/18/2013 3:13:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:37 PM -- Verifying database checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:48 PM -- Verifying log checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18 15 19 48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 15 19 48.xml is saved.
6/18/2013 3:19:48 PM -- Jetstress testing ends.
6/18/2013 3:30:54 PM -- Jetstress testing begins ...
6/18/2013 3:30:54 PM -- Prepare testing begins ...
6/18/2013 3:30:59 PM -- Attaching databases ...
6/18/2013 3:30:59 PM -- Prepare testing ends.
6/18/2013 3:30:59 PM -- Dispatching transactions begins ...
6/18/2013 3:30:59 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:59 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:05 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:05 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:10 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:10 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:10 PM -- Attaining prerequisites:
6/18/2013 3:32:38 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1217004000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:38 PM -- Performance logging ends.
6/18/2013 6:06:37 PM -- JetInterop batch transaction stats: 48261, 47876, 48075, 48535 and 47826.
6/18/2013 6:06:37 PM -- Dispatching transactions ends.
6/18/2013 6:06:37 PM -- Shutting down databases ...
6/18/2013 6:06:38 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.blg has 485 samples.
6/18/2013 6:06:38 PM -- Creating test report ...
6/18/2013 6:06:42 PM -- Instance376.1 has 12.8 for I/O Database Reads Average Latency.
```

```
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:42 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.xml has 479 samples gueried.
```

Server 9 – JS14

Test Summary

Overall Test Result	Pass
Machine Name	JS14
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:30:49 PM
Test End Time	6/18/2013 6:06:34 PM
Collection Start Time	6/18/2013 3:32:26 PM
Collection End Time	6/18/2013 5:32:16 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	910.09
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10742162325504
Final Database Size (bytes)	10745542934528
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3036.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb							
Instance3036.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb							
Instance3036.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb							
Instance3036.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb							
Instance3036.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb							

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
stance3036.1	12.100	2.043	114.481	65.430	33784.167	36124.956	0.000	0.943	0.000	55.253	0.000	4766.185
Instance3036.2	12.084	2.409	116.171	66.367	33660.690	36143.580	0.000	0.946	0.000	56.063	0.000	4786.265
Instance3036.3	12.363	2.294	117.612	67.271	33693.440	36069.199	0.000	0.941	0.000	56.511	0.000	4722.468
Instance3036.4	12.407	1.977	116.730	66.755	33601.519	36129.672	0.000	0.941	0.000	56.489	0.000	4714.321
Instance3036.5	12.335	1.761	114.085	65.188	33620.694	36127.055	0.000	0.942	0.000	55.489	0.000	4746.210

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3036.1	31.522	261919.794
Instance3036.2	31.515	261967.203
Instance3036.3	31.502	261940.019
Instance3036.4	31.472	261951.641
Instance3036.5	31.299	261953.932

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
nstance3036.1	1.070	232504.707
Instance3036.2	1.093	232553.264
Instance3036.3	1.085	232542.448
Instance3036.4	1.083	232507.286
Instance3036.5	1.072	232528.740

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
nstance3036.1	12.100	2.043	146.002	65.430	83038.525	36124.956	13.105	0.943	1.070	55.253	232504.707	4766.185
Instance3036.2	12.084	2.409	147.687	66.367	82379.878	36143.580	13.201	0.946	1.093	56.063	232553.264	4786.265
Instance3036.3	12.363	2.294	149.114	67.271	81913.275	36069.199	12.741	0.941	1.085	56.511	232542.448	4722.468
Instance3036.4	12.407	1.977	148.201	66.755	82093.492	36129.672	13.864	0.941	1.083	56.489	232507.286	4714.321
Instance3036.5	12.335	1.761	145.384	65.188	82777.440	36127.055	13.104	0.942	1.072	55.489	232528.740	4746.210

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.767	0.000	3.139
Available MBytes	59971.223	59826.000	60024.000
Free System Page Table Entries	33555161.896	33555100.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	76682618.388	76677120.000	76730368.000
Pool Paged Bytes	227446151.215	225034240.000	228024320.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

6/18/2013 1:01:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.

Test Log

```
6/18/2013 10:57:02 AM -- Jetstress testing begins ...6/18/2013 10:57:02 AM -- Prepare testing begins ...
6/18/2013 10:57:08 AM -- Attaching databases ...
6/18/2013 10:57:08 AM -- Prepare testing ends.
6/18/2013 10:57:08 AM -- Dispatching transactions begins ...
6/18/2013 10:57:08 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:08 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:14 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:14 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:19 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:19 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:19 AM -- Attaining prerequisites:
6/18/2013 10:59:56 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214312000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:57 PM -- Performance logging ends.
6/18/2013 1:01:42 PM -- JetInterop batch transaction stats: 28495, 28592, 28499, 28409 and 28651.
6/18/2013 1:01:42 PM -- Dispatching transactions ends.
6/18/2013 1:01:42 PM -- Shutting down databases ...
6/18/2013 1:01:43 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 14.blg has 489 samples.
6/18/2013 1:01:43 PM -- Creating test report ...
6/18/2013 1:01:47 PM -- Instance3036.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
```

```
6/18/2013 1:01:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.xml has 478 samples queried.
6/18/2013 1:01:48 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.html is saved.
6/18/2013 1:01:49 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:49 PM -- Verifying database checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:23 PM -- Verifying log checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_3_23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_23.xml is saved.
6/18/2013 1:03:23 PM -- Jetstress testing ends.
6/18/2013 1:10:53 PM -- Jetstress testing begins ...
6/18/2013 1:10:53 PM -- Prepare testing begins ...
6/18/2013 1:10:58 PM -- Attaching databases ...
6/18/2013 1:10:58 PM -- Prepare testing ends.
6/18/2013 1:10:58 PM -- Dispatching transactions begins ...
6/18/2013 1:10:58 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:58 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:04 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:04 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:09 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:09 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:09 PM -- Attaining prerequisites:
6/18/2013 1:13:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212580000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:01 PM -- Performance logging ends.
6/18/2013 3:13:27 PM -- JetInterop batch transaction stats: 38329, 38212, 38631, 38609 and 38554.
6/18/2013 3:13:27 PM -- Dispatching transactions ends.
6/18/2013 3:13:27 PM -- Shutting down databases ...
6/18/2013 3:13:28 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 11 4.blg has 486 samples.
6/18/2013 3:13:28 PM -- Creating test report ...
6/18/2013 3:13:31 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
```

```
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:31 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 11 4.xml has 478 samples queried.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.html is saved.
6/18/2013 3:13:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:32 PM -- Verifying database checksums ...
6/18/2013 3:19:58 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:59 PM -- Verifying log checksums ...
6/18/2013 3:19:59 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 15 19 59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_59.xml is saved.
6/18/2013 3:19:59 PM -- Jetstress testing ends.
6/18/2013 3:30:49 PM -- Jetstress testing begins ...
6/18/2013 3:30:49 PM -- Prepare testing begins ...
6/18/2013 3:30:54 PM -- Attaching databases ...
6/18/2013 3:30:54 PM -- Prepare testing ends.
6/18/2013 3:30:54 PM -- Dispatching transactions begins ...
6/18/2013 3:30:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
```

6/18/2013 3:31:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/18/2013 3:31:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:05 PM -- Attaining prerequisites:
6/18/2013 3:32:26 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208418000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:26 PM -- Performance logging ends.
6/18/2013 6:06:33 PM -- JetInterop batch transaction stats: 48153, 48521, 48670, 48815 and 48195.
6/18/2013 6:06:33 PM -- Dispatching transactions ends.
6/18/2013 6:06:33 PM -- Shutting down databases ...
6/18/2013 6:06:34 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.blg has 484 samples.
6/18/2013 6:06:34 PM -- Creating test report ...
6/18/2013 6:06:37 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:37 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:37 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 0.xml has 478 samples gueried.
```

Server 10 – JS15

Test Summary

Overall Test Result	Pass
Machine Name	JS15
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 3:30:44 PM
Test End Time	6/18/2013 6:06:31 PM
Collection Start Time	6/18/2013 3:32:27 PM
Collection End Time	6/18/2013 5:32:27 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	838.94
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10741851947008
Final Database Size (bytes)	10745006063616
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3368.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3368.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3368.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3368.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3368.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
stance3368.1	12.496	2.364	106.880	61.084	33832.792	36240.480	0.000	0.947	0.000	52.025	0.000	4746.446
Instance3368.2	12.785	2.189	107.410	61.365	33689.024	36202.633	0.000	0.940	0.000	52.347	0.000	4745.558
Instance3368.3	12.598	2.019	106.515	60.830	33704.711	36221.827	0.000	0.947	0.000	51.836	0.000	4738.217
Instance3368.4	14.093	1.910	106.144	60.667	33624.429	36239.146	0.000	0.942	0.000	52.193	0.000	4707.903
Instance3368.5	12.846	1.767	106.937	61.107	33752.482	36282.257	0.000	0.945	0.000	52.438	0.000	4754.570

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3368.1	31.500	261953.467
Instance3368.2	31.497	261957.767
Instance3368.3	31.465	261980.789
Instance3368.4	31.317	261923.786
Instance3368.5	31.443	261989.543

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3368.1	1.003	232521.500
Instance3368.2	1.011	232071.722
Instance3368.3	0.999	230594.708
Instance3368.4	0.998	232543.515

Total I/O Performance

MSExchange Database ==>	I/O Database	I/O Database	I/O Database	I/O Database	I/O Database Reads Average	I/O Database Writes Average	I/O Log Reads	I/O Log Writes	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes
Instances	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Bytes	Bytes	Average Latency (msec)	Average Latency (msec)	11000057000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, we age 5, tee	Average Bytes
Instance3368.1	12.496	2.364	138.380	61.084	85760.920	36240.480	13.678	0.947	1.003	52.025	232521.500	4746.446
Instance3368.2	12.785	2.189	138.908	61.365	85448.804	36202.633	13.114	0.940	1.011	52.347	232071.722	4745.558
Instance3368.3	12.598	2.019	137.980	60.830	85760.154	36221.827	13.781	0.947	0.999	51.836	230594.708	4738.217
Instance3368.4	14.093	1.910	137.461	60.667	85636.552	36239.146	14.455	0.942	0.998	52.193	232543.515	4707.903
Instance3368.5	12.846	1.767	138.380	61.107	85612.494	36282.257	13.925	0.945	1.014	52.438	232540.824	4754.570

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.652	0.000	2.435
Available MBytes	60012.954	60005.000	60113.000
Free System Page Table Entries	33555161.992	33555100.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	75043251.200	75030528.000	75087872.000
Pool Paged Bytes	226934169.600	224526336.000	227508224.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:57:05 AM -- Jetstress testing begins ...
6/18/2013 10:57:05 AM -- Prepare testing begins ...
6/18/2013 10:57:11 AM -- Attaching databases ...
6/18/2013 10:57:11 AM -- Prepare testing ends.
6/18/2013 10:57:11 AM -- Dispatching transactions begins ...
6/18/2013 10:57:11 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:11 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:17 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:17 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:22 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:22 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:22 AM -- Attaining prerequisites:
6/18/2013 11:00:09 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1216705000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:00:10 PM -- Performance logging ends.
6/18/2013 1:01:44 PM -- JetInterop batch transaction stats: 27048, 27032, 26988, 26878 and 26468.
6/18/2013 1:01:44 PM -- Dispatching transactions ends.
6/18/2013 1:01:44 PM -- Shutting down databases ...
6/18/2013 1:01:45 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 1:01:45 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.blg has 490 samples.
6/18/2013 1:01:45 PM -- Creating test report ...
6/18/2013 1:01:50 PM -- Instance3368.1 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:27 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.xml has 478 samples queried.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.html is saved.
6/18/2013 1:01:51 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:51 PM -- Verifying database checksums ...
6/18/2013 1:03:26 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:27 PM -- Verifying log checksums ...
6/18/2013 1:03:27 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013_6_18_13_3_27.xml is saved.
6/18/2013 1:03:27 PM -- Jetstress testing ends.
6/18/2013 1:10:56 PM -- Jetstress testing begins ...
6/18/2013 1:10:56 PM -- Prepare testing begins ...
6/18/2013 1:11:01 PM -- Attaching databases ...
6/18/2013 1:11:01 PM -- Prepare testing ends.
6/18/2013 1:11:01 PM -- Dispatching transactions begins ...
6/18/2013 1:11:01 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:11:01 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:07 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:07 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:12 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:12 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:12 PM -- Attaining prerequisites:
6/18/2013 1:13:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209389000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:04 PM -- Performance logging ends.
6/18/2013 3:13:23 PM -- JetInterop batch transaction stats: 35518, 35669, 35556, 35802 and 35966.
6/18/2013 3:13:23 PM -- Dispatching transactions ends.
6/18/2013 3:13:23 PM -- Shutting down databases ...
6/18/2013 3:13:24 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 3:13:24 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.blg has 486 samples.
6/18/2013 3:13:24 PM -- Creating test report ...
```

```
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 14.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.xml has 478 samples queried.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.html is saved.
6/18/2013 3:13:29 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:29 PM -- Verifying database checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:20:18 PM -- Verifying log checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_20_18.xml is saved.
6/18/2013 3:20:18 PM -- Jetstress testing ends.
6/18/2013 3:30:44 PM -- Jetstress testing begins ...
6/18/2013 3:30:44 PM -- Prepare testing begins ...
6/18/2013 3:30:50 PM -- Attaching databases ...
6/18/2013 3:30:50 PM -- Prepare testing ends.
6/18/2013 3:30:50 PM -- Dispatching transactions begins ...
6/18/2013 3:30:50 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:50 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:30:56 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

6/18/2013 3:30:56 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).

```
6/18/2013 3:31:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:00 PM -- Attaining prerequisites:
6/18/2013 3:32:27 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211609000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:28 PM -- Performance logging ends.
6/18/2013 6:06:29 PM -- JetInterop batch transaction stats: 44740, 45056, 44895, 45109 and 44950.
6/18/2013 6:06:29 PM -- Dispatching transactions ends.
6/18/2013 6:06:29 PM -- Shutting down databases ...
6/18/2013 6:06:31 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 6:06:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.blg has 485 samples.
6/18/2013 6:06:31 PM -- Creating test report ...
6/18/2013 6:06:34 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 12.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 14.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.xml has 479 samples gueried.
```

Appendix B: Stress Testing

Server 1 – JS6

Test Summary

Overall Test Result	Pass
Machine Name	JS6
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:02 PM
Test End Time	6/20/2013 9:25:03 AM
Collection Start Time	6/18/2013 11:32:48 PM
Collection End Time	6/19/2013 11:32:47 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_13.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	928.722
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745836535808
Final Database Size (bytes)	10790346489856
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance2792.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2792.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2792.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2792.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance2792.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	12.230	2.108	117.355	68.351	33600.553	35299.070	0.000	0.939	0.000	55.852	0.000	4763.569
Instance2792.2	12.110	2.496	117.310	68.342	33642.310	35302.428	0.000	0.938	0.000	55.846	0.000	4763.816
Instance2792.3	12.098	2.397	117.216	68.278	33618.313	35300.799	0.000	0.939	0.000	55.876	0.000	4769.709
Instance2792.4	12.264	2.068	117.463	68.412	33599.272	35302.671	0.000	0.939	0.000	55.849	0.000	4755.043
Instance2792.5	12.315	1.795	117.528	68.467	33554.630	35289.140	0.000	0.940	0.000	55.939	0.000	4761.696

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2792.1	31.215	261945.555
Instance2792.2	31.222	261939.698
Instance2792.3	31.308	261948.813
Instance2792.4	31.226	261937.210
Instance2792.5	31.224	261959.190

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance2792.1	1.082	232531.714
Instance2792.2	1.081	232473.019
Instance2792.3	1.084	232492.053
Instance2792.4	1.080	232515.453
Instance2792.5	1.083	232461.734

Total I/O Performance

MSExchange	I/O	I/O	I/O	I/O	I/O Database	I/O Database	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log Reads	I/O Log
Database ==>	Database	Database	Database	Database	Reads	Writes	Reads	Writes	Reads/sec	Writes/sec	Average Bytes	Writes
Instances	Reads	Writes	Reads/sec	Writes/sec	Average Bytes	Average Bytes	Average	Average				Average
	Average	Average					Latency	Latency				Bytes
	Latency	Latency					(msec)	(msec)				
	(msec)	(msec)										
Instance2792.1	12.230	2.108	148.570	68.351	81576.737	35299.070	13.272	0.939	1.082	55.852	232531.714	4763.569
Instance2792.2	12.110	2.496	148.533	68.342	81631.706	35302.428	12.860	0.938	1.081	55.846	232473.019	4763.816
Instance2792.3	12.098	2.397	148.524	68.278	81748.998	35300.799	12.937	0.939	1.084	55.876	232492.053	4769.709
Instance2792.4	12.264	2.068	148.689	68.412	81552.518	35302.671	13.140	0.939	1.080	55.849	232515.453	4755.043
Instance2792.5	12.315	1.795	148.752	68.467	81498.251	35289.140	13.027	0.940	1.083	55.939	232461.734	4761.696

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.756	0.000	3.518
Available MBytes	28584.894	28434.000	28618.000
Free System Page Table Entries	33555161.875	33555098.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	93569301.767	93544448.000	93646848.000
Pool Paged Bytes	230170001.516	228884480.000	232071168.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:39 AM -- Jetstress testing begins ...
6/18/2013 10:56:39 AM -- Prepare testing begins ...
6/18/2013 10:56:45 AM -- Attaching databases ...
6/18/2013 10:56:45 AM -- Prepare testing ends.
6/18/2013 10:56:45 AM -- Dispatching transactions begins ...
6/18/2013 10:56:45 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:45 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:51 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:51 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:56:57 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:56:57 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:56:57 AM -- Attaining prerequisites:
6/18/2013 10:59:17 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210290000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:17 PM -- Performance logging ends.
6/18/2013 1:01:23 PM -- JetInterop batch transaction stats: 29405, 29337, 29553, 29188 and 29402.
6/18/2013 1:01:23 PM -- Dispatching transactions ends.
6/18/2013 1:01:23 PM -- Shutting down databases ...
6/18/2013 1:01:25 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 1:01:25 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 56 51.blg has 488 samples.
6/18/2013 1:01:25 PM -- Creating test report ...
6/18/2013 1:01:28 PM -- Instance2792.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:28 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 56 51,xml has 478 samples gueried.
6/18/2013 1:01:29 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.html is saved.
6/18/2013 1:01:30 PM -- Performance logging begins (interval: 30000 ms).
```

```
6/18/2013 1:01:30 PM -- Verifying database checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:43 PM -- Verifying log checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB4 (0 
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\Application 2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_44.xml is saved.
6/18/2013 1:02:44 PM -- Jetstress testing ends.
6/18/2013 1:10:31 PM -- Jetstress testing begins ...
6/18/2013 1:10:31 PM -- Prepare testing begins ...
6/18/2013 1:10:36 PM -- Attaching databases ...
6/18/2013 1:10:36 PM -- Prepare testing ends.
6/18/2013 1:10:36 PM -- Dispatching transactions begins ...
6/18/2013 1:10:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:47 PM -- Attaining prerequisites:
6/18/2013 1:12:17 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213207000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:18 PM -- Performance logging ends.
6/18/2013 3:14:07 PM -- JetInterop batch transaction stats: 40799, 40518, 40863, 40517 and 40635.
6/18/2013 3:14:07 PM -- Dispatching transactions ends.
6/18/2013 3:14:07 PM -- Shutting down databases ...
6/18/2013 3:14:08 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 3:14:08 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.blg has 485 samples.
6/18/2013 3:14:08 PM -- Creating test report ...
6/18/2013 3:14:11 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
```

```
6/18/2013 3:14:11 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:11 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.xml has 478 samples gueried.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 10 42.html is saved.
6/18/2013 3:14:13 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:13 PM -- Verifying database checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:45 PM -- Verifying log checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 15 23 45 xml is saved.
6/18/2013 3:23:45 PM -- Jetstress testing ends.
6/18/2013 3:31:43 PM -- Jetstress testing begins ...
6/18/2013 3:31:43 PM -- Prepare testing begins ...
6/18/2013 3:31:48 PM -- Attaching databases ...
6/18/2013 3:31:48 PM -- Prepare testing ends.
6/18/2013 3:31:48 PM -- Dispatching transactions begins ...
6/18/2013 3:31:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:55 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:55 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:32:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:32:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:32:00 PM -- Attaining prerequisites:
6/18/2013 3:33:50 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215541000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:51 PM -- Performance logging ends.
6/18/2013 6:07:18 PM -- JetInterop batch transaction stats: 49701, 50075, 49817, 49657 and 50057.
6/18/2013 6:07:19 PM -- Dispatching transactions ends.
6/18/2013 6:07:19 PM -- Shutting down databases ...
6/18/2013 6:07:20 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 6:07:20 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.blg has 486 samples.
6/18/2013 6:07:20 PM -- Creating test report ...
6/18/2013 6:07:23 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 11.9 for I/O Database Reads Average Latency.
```

```
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:23 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.xml has 478 samples gueried.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.html is saved.
6/18/2013 6:07:24 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:24 PM -- Verifying database checksums ...
6/18/2013 10:35:18 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB (100% proce
C:\DB\DB5 (100% processed)
6/18/2013 10:35:18 PM -- Performance logging ends.
6/18/2013 10:35:18 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_23.blg has 535 samples.
6/18/2013 10:35:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 18 18 7 23.html is saved.
6/18/2013 10:35:21 PM -- Verifying log checksums ...
6/18/2013 10:35:23 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_35_23.evt is saved.
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_35_23.evt is saved.
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 22 35 23.xml is saved.
6/18/2013 10:35:23 PM -- Jetstress testing ends.
6/18/2013 11:31:02 PM -- Jetstress testing begins ...
6/18/2013 11:31:02 PM -- Prepare testing begins ...
6/18/2013 11:31:07 PM -- Attaching databases ...
6/18/2013 11:31:07 PM -- Prepare testing ends.
6/18/2013 11:31:07 PM -- Dispatching transactions begins ...
6/18/2013 11:31:07 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:07 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:13 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:13 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:18 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:18 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:18 PM -- Attaining prerequisites:
6/18/2013 11:32:48 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209364000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:32:49 PM -- Performance logging ends.
```

```
6/20/2013 9:25:01 AM -- JetInterop batch transaction stats: 634110, 632373, 632533, 632135 and 632684.
6/20/2013 9:25:02 AM -- Dispatching transactions ends.
6/20/2013 9:25:02 AM -- Shutting down databases ...
6/20/2013 9:25:03 AM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/20/2013 9:25:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 13.blq has 5757 samples.
6/20/2013 9:25:03 AM -- Creating test report ...
6/20/2013 9:25:31 AM -- Instance2792.1 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:31 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:31 AM -- C:\Program Files\Exchange Jetstress\Stress 2013_6_18_23_31_13.xml has 5750 sample
```

Server 2 – JS7

Test Summary

Overall Test Result	Pass
Machine Name	JS7
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:06 PM
Test End Time	6/20/2013 9:25:07 AM
Collection Start Time	6/18/2013 11:32:55 PM
Collection End Time	6/19/2013 11:32:52 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	938.431
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745920421888
Final Database Size (bytes)	10790942081024
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance2224.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb					
Instance2224.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb					
Instance2224.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb					
Instance2224.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb					
Instance2224.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb					

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	12.259	2.257	118.941	69.270	33590.070	35285.005	0.000	0.941	0.000	56.552	0.000	4766.108
Instance2224.2	12.192	2.319	118.262	68.874	33585.177	35296.625	0.000	0.940	0.000	56.221	0.000	4775.594
Instance2224.3	12.157	2.091	118.824	69.218	33594.312	35301.774	0.000	0.940	0.000	56.563	0.000	4774.589
Instance2224.4	11.849	2.185	118.301	68.891	33638.737	35295.979	0.000	0.941	0.000	56.177	0.000	4774.750
Instance2224.5	12.174	1.845	118.712	69.140	33595.644	35289.909	0.000	0.940	0.000	56.516	0.000	4766.444

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2224.1	31.197	261937.461
Instance2224.2	31.244	261955.388
Instance2224.3	31.256	261945.031
Instance2224.4	31.263	261952.773
Instance2224.5	31.270	261943.715

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance2224.1	1.096	232470.964
Instance2224.2	1.092	232484.239
Instance2224.3	1.098	232495.358
Instance2224.4	1.090	232519.348
Instance2224.5	1.095	232513.149

Total I/O Performance

MSExchange Database ==>	I/O Database	I/O Database	I/O Database	I/O Database	I/O Database Reads Average	I/O Database Writes Average	I/O Log Reads	I/O Log Writes	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes
Instances	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Bytes	Bytes	Average Latency (msec)	Average Latency (msec)				Average Bytes
Instance2224.1	12.259	2.257	150.139	69.270	81038.489	35285.005	13.232	0.941	1.096	56.552	232470.964	4766.108
Instance2224.2	12.192	2.319	149.506	68.874	81310.282	35296.625	12.500	0.940	1.092	56.221	232484.239	4775.594
Instance2224.3	12.157	2.091	150.079	69.218	81150.967	35301.774	13.192	0.940	1.098	56.563	232495.358	4774.589
Instance2224.4	11.849	2.185	149.564	68.891	81362.432	35295.979	12.782	0.941	1.090	56.177	232519.348	4774.750
Instance2224.5	12.174	1.845	149.982	69.140	81203.970	35289.909	12.891	0.940	1.095	56.516	232513.149	4766.444

Host System Performance

Counter	Average	Minimum	Maximum	
% Processor Time	0.746	0.000	3.037	
Available MBytes	28574.583	28427.000	28605.000	
Free System Page Table Entries	33555673.973	33555610.000	33556188.000	
Transition Pages RePurposed/sec	0.000	0.000	0.000	
Pool Nonpaged Bytes	89165471.449	89137152.000	89284608.000	
Pool Paged Bytes	219176336.092	218193920.000	221257728.000	
Database Page Fault Stalls/sec	0.000	0.000	0.000	

Test Log

```
6/18/2013 10:56:43 AM -- Jetstress testing begins ...
6/18/2013 10:56:43 AM -- Prepare testing begins ...
6/18/2013 10:56:49 AM -- Attaching databases ...
6/18/2013 10:56:49 AM -- Prepare testing ends.
6/18/2013 10:56:49 AM -- Dispatching transactions begins ...
6/18/2013 10:56:49 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:49 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:55 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:55 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:00 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:00 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:00 AM -- Attaining prerequisites:
6/18/2013 10:59:23 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212850000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:24 PM -- Performance logging ends.
6/18/2013 1:01:26 PM -- JetInterop batch transaction stats: 29643, 29265, 29554, 29573 and 29758.
6/18/2013 1:01:26 PM -- Dispatching transactions ends.
6/18/2013 1:01:26 PM -- Shutting down databases ...
6/18/2013 1:01:27 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 1:01:27 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.blg has 488 samples.
6/18/2013 1:01:27 PM -- Creating test report ...
6/18/2013 1:01:30 PM -- Instance2224.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:06 PM -- Instance2224.1 has 12.0 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:30 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:30 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.xml has 478 samples queried.
6/18/2013 1:01:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.html is saved.
6/18/2013 1:01:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:32 PM -- Verifying database checksums ...
6/18/2013 1:02:45 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:46 PM -- Verifying log checksums ...
6/18/2013 1:02:46 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_46.xml is saved.
6/18/2013 1:02:46 PM -- Jetstress testing ends.
6/18/2013 1:10:33 PM -- Jetstress testing begins ...
6/18/2013 1:10:33 PM -- Prepare testing begins ...
6/18/2013 1:10:39 PM -- Attaching databases ...
6/18/2013 1:10:39 PM -- Prepare testing ends.
6/18/2013 1:10:39 PM -- Dispatching transactions begins ...
6/18/2013 1:10:39 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:39 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:45 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:45 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:49 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:49 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:49 PM -- Attaining prerequisites:
6/18/2013 1:12:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214808000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:21 PM -- Performance logging ends.
6/18/2013 3:14:02 PM -- JetInterop batch transaction stats: 40566, 40795, 40522, 40949 and 40868.
6/18/2013 3:14:02 PM -- Dispatching transactions ends.
6/18/2013 3:14:02 PM -- Shutting down databases ...
6/18/2013 3:14:03 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 3:14:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.blg has 485 samples.
6/18/2013 3:14:03 PM -- Creating test report ...
```

```
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.xml has 478 samples gueried.
6/18/2013 3:14:07 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.html is saved.
6/18/2013 3:14:08 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:08 PM -- Verifying database checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:37 PM -- Verifying log checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_37.xml is saved.
6/18/2013 3:23:37 PM -- Jetstress testing ends.
6/18/2013 3:31:36 PM -- Jetstress testing begins ...
6/18/2013 3:31:36 PM -- Prepare testing begins ...
6/18/2013 3:31:42 PM -- Attaching databases ...
6/18/2013 3:31:42 PM -- Prepare testing ends.
6/18/2013 3:31:42 PM -- Dispatching transactions begins ...
6/18/2013 3:31:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:47 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

6/18/2013 10:37:31 PM -- Performance logging ends.

```
6/18/2013 3:31:47 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:53 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:53 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:53 PM -- Attaining prerequisites:
6/18/2013 3:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215050000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:44 PM -- Performance logging ends.
6/18/2013 6:07:13 PM -- JetInterop batch transaction stats: 50126, 50577, 50218, 50339 and 50236.
6/18/2013 6:07:14 PM -- Dispatching transactions ends.
6/18/2013 6:07:14 PM -- Shutting down databases ...
6/18/2013 6:07:15 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 6:07:15 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.blg has 486 samples.
6/18/2013 6:07:15 PM -- Creating test report ...
6/18/2013 6:07:18 PM -- Instance2224.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:18 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.xml has 478 samples gueried.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 47.html is saved.
6/18/2013 6:07:19 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:19 PM -- Verifying database checksums ...
6/18/2013 10:37:31 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
```

```
6/18/2013 10:37:31 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.blg has 540 samples.
6/18/2013 10:37:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.html is saved.
6/18/2013 10:37:34 PM -- Verifying log checksums ...
6/18/2013 10:37:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_37_36.xml is saved.
6/18/2013 10:37:36 PM -- Jetstress testing ends.
6/18/2013 11:31:06 PM -- Jetstress testing begins ...
6/18/2013 11:31:06 PM -- Prepare testing begins ...
6/18/2013 11:31:11 PM -- Attaching databases ...
6/18/2013 11:31:11 PM -- Prepare testing ends.
6/18/2013 11:31:11 PM -- Dispatching transactions begins ...
6/18/2013 11:31:11 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:11 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:17 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:17 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:23 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:23 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:23 PM -- Attaining prerequisites:
6/18/2013 11:32:55 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210425000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:32:55 PM -- Performance logging ends.
6/20/2013 9:25:06 AM -- JetInterop batch transaction stats: 640059, 639149, 641340, 638945 and 639845.
6/20/2013 9:25:06 AM -- Dispatching transactions ends.
6/20/2013 9:25:06 AM -- Shutting down databases ...
6/20/2013 9:25:07 AM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/20/2013 9:25:07 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 17.blg has 5757 samples.
6/20/2013 9:25:07 AM -- Creating test report ...
6/20/2013 9:25:32 AM -- Instance2224.1 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 12.2 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:32 AM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:32 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:32 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.xml has 5750 samples queried.
```

Server 3 – JS8

Test Summary

Overall Test Result	Pass
Machine Name	JS8
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:08 PM
Test End Time	6/20/2013 9:25:11 AM
Collection Start Time	6/18/2013 11:33:03 PM
Collection End Time	6/19/2013 11:32:53 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	930.159
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745660375040
Final Database Size (bytes)	10790195494912
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

=							
Instance3352.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb						
Instance3352.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb						
Instance3352.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb						
Instance3352.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb						
Instance3352.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb						

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2920.1	10.319	2.063	71.166	43.640	34409.785	34941.151	0.000	0.849	0.000	36.152	0.000	4575.473
Instance2920.2	10.249	1.985	70.724	43.329	34441.655	34962.099	0.000	0.856	0.000	35.921	0.000	4588.400
Instance2920.3	11.057	1.944	70.657	43.289	34229.636	34939.402	0.000	0.849	0.000	35.978	0.000	4563.807
Instance2920.4	10.718	1.788	71.081	43.581	34334.487	34947.704	0.000	0.856	0.000	36.118	0.000	4577.781

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3352.1	31.434	261948.725
Instance3352.2	31.513	261946.236
Instance3352.3	31.535	261952.905
Instance3352.4	31.522	261965.898
Instance3352.5	31.518	261961.567

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3352.1	1.084	232533.061
Instance3352.2	1.081	232400.475
Instance3352.3	1.083	232514.328
Instance3352.4	1.082	232523.831
Instance3352.5	1.080	232518.109

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	13.243	1.769	149.161	68.491	81630.284	35306.743	13.771	0.996	1.084	56.003	232533.061	4758.992
Instance3352.2	11.819	1.776	148.828	68.259	81979.946	35303.688	13.201	0.994	1.081	55.499	232400.475	4787.073
Instance3352.3	11.711	2.051	149.219	68.503	81885.320	35308.962	13.382	0.986	1.083	55.744	232514.328	4776.327
Instance3352.4	11.870	2.409	149.217	68.495	81836.020	35290.186	13.039	0.990	1.082	55.667	232523.831	4779.431
Instance3352.5	11.791	2.840	149.075	68.433	81929.427	35295.445	13.615	0.993	1.080	55.647	232518.109	4774.989

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.753	0.000	3.135
Available MBytes	28580.705	28348.000	28657.000
Free System Page Table Entries	33555672.891	33555609.000	33555675.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	91428842.989	91406336.000	91590656.000
Pool Paged Bytes	230770692.629	229691392.000	232681472.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:47 AM -- Jetstress testing begins ...
6/18/2013 10:56:47 AM -- Prepare testing begins ...
6/18/2013 10:56:53 AM -- Attaching databases ...
6/18/2013 10:56:53 AM -- Prepare testing ends.
6/18/2013 10:56:53 AM -- Dispatching transactions begins ...
6/18/2013 10:56:53 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:53 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:59 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:59 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:05 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:05 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:05 AM -- Attaining prerequisites:
6/18/2013 10:59:35 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1219310000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:36 PM -- Performance logging ends.
6/18/2013 1:01:30 PM -- JetInterop batch transaction stats: 28755, 28320, 28835, 28726 and 28827.
6/18/2013 1:01:30 PM -- Dispatching transactions ends.
6/18/2013 1:01:30 PM -- Shutting down databases ...
6/18/2013 1:01:32 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 1:01:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.blg has 489 samples.
6/18/2013 1:01:32 PM -- Creating test report ...
6/18/2013 1:01:35 PM -- Instance3352.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:01 PM -- Instance3352.1 has 13.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.xml has 479 samples queried.
6/18/2013 1:01:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.html is saved.
6/18/2013 1:01:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:37 PM -- Verifying database checksums ...
6/18/2013 1:02:50 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:51 PM -- Verifying log checksums ...
6/18/2013 1:02:51 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 2 51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 13 2 51.xml is saved.
6/18/2013 1:02:51 PM -- Jetstress testing ends.
6/18/2013 1:10:36 PM -- Jetstress testing begins ...
6/18/2013 1:10:36 PM -- Prepare testing begins ...
6/18/2013 1:10:42 PM -- Attaching databases ...
6/18/2013 1:10:42 PM -- Prepare testing ends.
6/18/2013 1:10:42 PM -- Dispatching transactions begins ...
6/18/2013 1:10:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:48 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:48 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:52 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:52 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:52 PM -- Attaining prerequisites:
6/18/2013 1:12:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214845000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:56 PM -- JetInterop batch transaction stats: 39626, 39706, 39573, 39658 and 39994.
6/18/2013 3:13:56 PM -- Dispatching transactions ends.
6/18/2013 3:13:56 PM -- Shutting down databases ...
6/18/2013 3:13:58 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 3:13:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.blg has 485 samples.
6/18/2013 3:13:58 PM -- Creating test report ...
```

```
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.xml has 478 samples gueried.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.html is saved.
6/18/2013 3:14:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:02 PM -- Verifying database checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:26 PM -- Verifying log checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_26.xml is saved.
6/18/2013 3:23:26 PM -- Jetstress testing ends.
6/18/2013 3:31:24 PM -- Jetstress testing begins ...
6/18/2013 3:31:24 PM -- Prepare testing begins ...
6/18/2013 3:31:30 PM -- Attaching databases ...
6/18/2013 3:31:30 PM -- Prepare testing ends.
6/18/2013 3:31:30 PM -- Dispatching transactions begins ...
6/18/2013 3:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:41 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:41 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:41 PM -- Attaining prerequisites:
6/18/2013 3:33:25 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211384000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:25 PM -- Performance logging ends.
6/18/2013 6:07:01 PM -- JetInterop batch transaction stats: 49011, 49241, 49179, 49282 and 49742.
6/18/2013 6:07:01 PM -- Dispatching transactions ends.
6/18/2013 6:07:01 PM -- Shutting down databases ...
6/18/2013 6:07:03 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 6:07:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.blg has 486 samples.
6/18/2013 6:07:03 PM -- Creating test report ...
6/18/2013 6:07:06 PM -- Instance3352.1 has 13.3 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.xml has 479 samples gueried.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 36.html is saved.
6/18/2013 6:07:07 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:07 PM -- Verifying database checksums ...
6/18/2013 11:04:43 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:04:43 PM -- Performance logging ends.
```

```
6/18/2013 11:04:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_6.blg has 594 samples.
6/18/2013 11:04:47 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_6.html is saved.
6/18/2013 11:04:47 PM -- Verifying log checksums ...
6/18/2013 11:04:48 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_4_48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_4_48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_4_48.xml is saved.
6/18/2013 11:04:48 PM -- Jetstress testing ends.
6/18/2013 11:31:08 PM -- Jetstress testing begins ...
6/18/2013 11:31:08 PM -- Prepare testing begins ...
6/18/2013 11:31:14 PM -- Attaching databases ...
6/18/2013 11:31:14 PM -- Prepare testing ends.
6/18/2013 11:31:14 PM -- Dispatching transactions begins ...
6/18/2013 11:31:14 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:14 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:20 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:20 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:25 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:25 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:25 PM -- Attaining prerequisites:
6/18/2013 11:33:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212363000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:04 PM -- Performance logging ends.
6/20/2013 9:25:09 AM -- JetInterop batch transaction stats: 634106, 632752, 634222, 633891 and 633650.
6/20/2013 9:25:09 AM -- Dispatching transactions ends.
6/20/2013 9:25:09 AM -- Shutting down databases ...
6/20/2013 9:25:11 AM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/20/2013 9:25:11 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 20.blg has 5757 samples.
6/20/2013 9:25:11 AM -- Creating test report ...
6/20/2013 9:25:37 AM -- Instance3352.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:37 AM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.9 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:37 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:37 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.xml has 5750 samples queried.
```

Server 4 – JS9

Test Summary

Overall Test Result	Pass
Machine Name	JS9
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:12 PM
Test End Time	6/20/2013 9:25:14 AM
Collection Start Time	6/18/2013 11:33:07 PM
Collection End Time	6/19/2013 11:32:57 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Standard Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	941.385
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745710706688
Final Database Size (bytes)	10790791086080
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance1424.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb						
Instance1424.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb						
Instance1424.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb						
Instance1424.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb						
Instance1424.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb						

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	13.245	1.650	118.677	69.013	33442.802	35293.922	0.000	0.985	0.000	56.410	0.000	4757.110
Instance1424.2	11.780	1.768	119.395	69.467	33581.960	35283.651	0.000	0.989	0.000	56.263	0.000	4781.336
Instance1424.3	11.742	2.056	119.017	69.237	33635.055	35292.771	0.000	0.985	0.000	56.205	0.000	4779.876
Instance1424.4	11.802	2.467	118.885	69.181	33618.008	35299.437	0.000	0.989	0.000	56.234	0.000	4777.270
Instance1424.5	11.696	2.867	119.152	69.361	33600.177	35295.287	0.000	0.986	0.000	56.291	0.000	4786.676

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance1424.1	31.245	261951.118
Instance1424.2	31.370	261940.131
Instance1424.3	31.395	261952.089
Instance1424.4	31.371	261961.531
Instance1424.5	31.419	261933.856

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance1424.1	1.091	232517.095
Instance1424.2	1.094	232430.629
Instance1424.3	1.093	232435.263
Instance1424.4	1.093	232436.070
Instance1424.5	1.096	232478.889

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	13.245	1.650	149.923	69.013	81066.050	35293.922	12.838	0.985	1.091	56.410	232517.095	4757.110
Instance1424.2	11.780	1.768	150.765	69.467	81096.978	35283.651	13.203	0.989	1.094	56.263	232430.629	4781.336
Instance1424.3	11.742	2.056	150.412	69.237	81290.563	35292.771	13.326	0.985	1.093	56.205	232435.263	4779.876
Instance1424.4	11.802	2.467	150.257	69.181	81292.661	35299.437	12.985	0.989	1.093	56.234	232436.070	4777.270
Instance1424.5	11.696	2.867	150.571	69.361	81246.014	35295.287	14.059	0.986	1.096	56.291	232478.889	4786.676

Host System Performance

Counter	Average	Minimum	Maximum	
% Processor Time	0.723	0.000	2.662	
Available MBytes	28534.930	28390.000	28622.000	
Free System Page Table Entries	33555673.882	33555610.000	33555676.000	
Transition Pages RePurposed/sec	0.000	0.000	0.000	
Pool Nonpaged Bytes	82838227.620	82796544.000	83066880.000	
Pool Paged Bytes	241515978.494	240402432.000	245051392.000	
Database Page Fault Stalls/sec	0.000	0.000	0.000	

Test Log

```
6/18/2013 10:56:51 AM -- Jetstress testing begins ...
6/18/2013 10:56:51 AM -- Prepare testing begins ...
6/18/2013 10:56:58 AM -- Attaching databases ...
6/18/2013 10:56:58 AM -- Prepare testing ends.
6/18/2013 10:56:58 AM -- Dispatching transactions begins ...
6/18/2013 10:56:58 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:58 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:04 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:04 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:08 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:08 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:08 AM -- Attaining prerequisites:
6/18/2013 10:59:41 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209700000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:28 PM -- JetInterop batch transaction stats: 28950, 29007, 29113, 28462 and 29068.
6/18/2013 1:01:28 PM -- Dispatching transactions ends.
6/18/2013 1:01:28 PM -- Shutting down databases ...
6/18/2013 1:01:30 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.blg has 489 samples.
6/18/2013 1:01:30 PM -- Creating test report ...
6/18/2013 1:01:34 PM -- Instance1424.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:56 PM -- Instance1424.1 has 13.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.xml has 478 samples queried.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.html is saved.
6/18/2013 1:01:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:35 PM -- Verifying database checksums ...
6/18/2013 1:02:54 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:55 PM -- Verifying log checksums ...
6/18/2013 1:02:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_55.xml is saved.
6/18/2013 1:02:55 PM -- Jetstress testing ends.
6/18/2013 1:10:38 PM -- Jetstress testing begins ...
6/18/2013 1:10:38 PM -- Prepare testing begins ...
6/18/2013 1:10:44 PM -- Attaching databases ...
6/18/2013 1:10:44 PM -- Prepare testing ends.
6/18/2013 1:10:44 PM -- Dispatching transactions begins ...
6/18/2013 1:10:44 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:44 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:50 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:50 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:55 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:55 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:55 PM -- Attaining prerequisites:
6/18/2013 1:12:32 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1218224000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:51 PM -- JetInterop batch transaction stats: 40165, 40015, 39927, 39446 and 40003.
6/18/2013 3:13:51 PM -- Dispatching transactions ends.
6/18/2013 3:13:51 PM -- Shutting down databases ...
6/18/2013 3:13:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 3:13:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.blg has 485 samples.
6/18/2013 3:13:53 PM -- Creating test report ...
```

```
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.xml has 478 samples gueried.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.html is saved.
6/18/2013 3:13:57 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:57 PM -- Verifying database checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:23:18 PM -- Verifying log checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_18.xml is saved.
6/18/2013 3:23:18 PM -- Jetstress testing ends.
6/18/2013 3:31:19 PM -- Jetstress testing begins ...
6/18/2013 3:31:19 PM -- Prepare testing begins ...
6/18/2013 3:31:24 PM -- Attaching databases ...
6/18/2013 3:31:24 PM -- Prepare testing ends.
6/18/2013 3:31:24 PM -- Dispatching transactions begins ...
6/18/2013 3:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

6/18/2013 11:23:58 PM -- Verifying log checksums ...

```
6/18/2013 3:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:35 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:35 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:35 PM -- Attaining prerequisites:
6/18/2013 3:33:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211597000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:21 PM -- Performance logging ends.
6/18/2013 6:06:51 PM -- JetInterop batch transaction stats: 49885, 49854, 49826, 49630 and 49416.
6/18/2013 6:06:51 PM -- Dispatching transactions ends.
6/18/2013 6:06:51 PM -- Shutting down databases ...
6/18/2013 6:06:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 6:06:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.blg has 486 samples.
6/18/2013 6:06:53 PM -- Creating test report ...
6/18/2013 6:06:56 PM -- Instance1424.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.xml has 478 samples gueried.
6/18/2013 6:06:57 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 30.html is saved.
6/18/2013 6:06:58 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:58 PM -- Verifying database checksums ...
6/18/2013 11:23:57 PM -- C:\DB\DB1 (36% processed), C:\DB\DB2 (38% processed), C:\DB\DB3 (38% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(38% processed)
```

```
6/18/2013 11:23:58 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_23_58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_23_58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 23 23 58.xml is saved.
6/18/2013 11:23:58 PM -- Jetstress testing ends.
6/18/2013 11:31:12 PM -- Jetstress testing begins ...
6/18/2013 11:31:12 PM -- Prepare testing begins ...
6/18/2013 11:31:18 PM -- Attaching databases ...
6/18/2013 11:31:18 PM -- Prepare testing ends.
6/18/2013 11:31:18 PM -- Dispatching transactions begins ...
6/18/2013 11:31:18 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:18 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:23 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:23 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:29 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:29 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:29 PM -- Attaining prerequisites:
6/18/2013 11:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211363000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:08 PM -- Performance logging ends.
6/20/2013 9:25:13 AM -- JetInterop batch transaction stats: 640995, 642366, 641371, 642573 and 642109.
6/20/2013 9:25:13 AM -- Dispatching transactions ends.
6/20/2013 9:25:13 AM -- Shutting down databases ...
6/20/2013 9:25:14 AM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/20/2013 9:25:14 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.blg has 5757 samples.
6/20/2013 9:25:14 AM -- Creating test report ...
6/20/2013 9:25:40 AM -- Instance1424.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 11.8 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
```

6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.

6/20/2013 9:25:40 AM -- Instance1424.5 has 11.7 for I/O Database Reads Average Latency.

6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.

6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.

6/20/2013 9:25:40 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.

6/20/2013 9:25:40 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.

6/20/2013 9:25:40 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 23.xml has 5750 samples queried.

Server 5 – JS10

Test Summary

Overall Test Result	Pass			
Machine Name	JS10			
Test Description	5000 users/server			
	10 servers			
	2GB mailboxes .15 IOPS/user			
	.18 IOPS tested			
	5 dbs per server			
	2200GB db/log combined volumes			
	2 copies			
	5 threads/db			
Test Start Time	6/18/2013 11:31:15 PM			
Test End Time	6/20/2013 9:25:17 AM			
Collection Start Time	6/18/2013 11:33:11 PM			
Collection End Time	6/19/2013 11:33:01 PM			
Jetstress Version	14.01.0180.003			
Ese Version	14.03.0123.002			
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)			
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_27.blg			

Database Sizing and Throughput

Achieved Transactional I/O per Second	937.955
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745761038336
Final Database Size (bytes)	10790774308864
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3992.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3992.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3992.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3992.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3992.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	13.257	2.159	118.711	69.062	33461.655	35298.431	0.000	0.939	0.000	56.610	0.000	4740.402
Instance3992.2	11.766	2.027	118.720	69.107	33634.910	35296.474	0.000	0.933	0.000	56.528	0.000	4773.550
Instance3992.3	11.750	2.015	118.391	68.877	33638.674	35294.961	0.000	0.939	0.000	56.197	0.000	4769.699
Instance3992.4	11.667	1.862	118.457	68.935	33664.438	35291.127	0.000	0.933	0.000	56.209	0.000	4773.595
Instance3992.5	11.757	1.706	118.641	69.053	33631.366	35297.055	0.000	0.939	0.000	56.409	0.000	4770.386

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3992.1	31.298	261939.901
Instance3992.2	31.454	261958.665
Instance3992.3	31.408	261934.284
Instance3992.4	31.476	261944.568
Instance3992.5	31.441	261949.364

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3992.1	1.091	232507.119
Instance3992.2	1.097	232479.248
Instance3992.3	1.090	232476.546
Instance3992.4	1.091	232452.762
Instance3992.5	1.094	232485.631

Total I/O Performance

MSExchange	I/O	I/O	I/O	I/O	I/O Database	I/O Database	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log Reads	I/O Log
Database ==> Instances	Database Reads Average Latency (msec)	Database Writes Average Latency (msec)	Database Reads/sec	Database Writes/sec	Reads Average Bytes	Writes Average Bytes	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Average Bytes	Writes Average Bytes
Instance3992.1	13.257	2.159	150.009	69.062	81131.811	35298.431	13.617	0.939	1.091	56.610	232507.119	4740.402
Instance3992.2	11.766	2.027	150.174	69.107	81457.808	35296.474	12.748	0.933	1.097	56.528	232479.248	4773.550
Instance3992.3	11.750	2.015	149.799	68.877	81504.725	35294.961	12.848	0.939	1.090	56.197	232476.546	4769.699
Instance3992.4	11.667	1.862	149.933	68.935	81588.803	35291.127	12.775	0.933	1.091	56.209	232452.762	4773.595
Instance3992.5	11.757	1.706	150.082	69.053	81462.111	35297.055	13.086	0.939	1.094	56.409	232485.631	4770.386

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.723	0.000	3.150
Available MBytes	59978.631	59820.000	60087.000
Free System Page Table Entries	33555673.968	33555610.000	33556182.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74680878.027	74604544.000	74850304.000
Pool Paged Bytes	221851286.190	220852224.000	224137216.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:54 AM -- Jetstress testing begins ...
6/18/2013 10:56:54 AM -- Prepare testing begins ...
6/18/2013 10:56:59 AM -- Attaching databases ...
6/18/2013 10:58:21 AM -- Jetstress testing begins ...
6/18/2013 10:58:21 AM -- Prepare testing begins ...
6/18/2013 10:58:26 AM -- Attaching databases ...
6/18/2013 10:58:26 AM -- Prepare testing ends.
6/18/2013 10:58:26 AM -- Dispatching transactions begins ...
6/18/2013 10:58:27 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:58:27 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:58:33 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:58:33 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:58:37 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:58:37 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:58:37 AM -- Attaining prerequisites:
6/18/2013 11:01:19 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213768000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:01:20 PM -- Performance logging ends.
6/18/2013 1:01:33 PM -- JetInterop batch transaction stats: 28554, 28934, 28713, 28744 and 28609.
6/18/2013 1:01:33 PM -- Dispatching transactions ends.
6/18/2013 1:01:33 PM -- Shutting down databases ...
6/18/2013 1:01:34 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.blg has 490 samples.
6/18/2013 1:01:34 PM -- Creating test report ...
6/18/2013 1:01:38 PM -- Instance3992.1 has 9.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 8.6 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 8.5 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
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6/18/2013 1:01:38 PM -- Instance3992.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:38 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.xml has 479 samples gueried.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 58 33.html is saved.
6/18/2013 1:01:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:39 PM -- Verifying database checksums ...
6/18/2013 1:03:07 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:08 PM -- Verifying log checksums ...
6/18/2013 1:03:08 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 13 3 8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_8.xml is saved.
6/18/2013 1:03:08 PM -- Jetstress testing ends.
6/18/2013 1:10:42 PM -- Jetstress testing begins ...
6/18/2013 1:10:42 PM -- Prepare testing begins ...
6/18/2013 1:10:48 PM -- Attaching databases ...
6/18/2013 1:10:48 PM -- Prepare testing ends.
6/18/2013 1:10:48 PM -- Dispatching transactions begins ...
6/18/2013 1:10:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:54 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:54 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:00 PM -- Attaining prerequisites:
6/18/2013 1:12:42 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214091000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:42 PM -- Performance logging ends.
6/18/2013 3:13:44 PM -- JetInterop batch transaction stats: 39666, 39743, 39580, 39429 and 39791.
6/18/2013 3:13:45 PM -- Dispatching transactions ends.
6/18/2013 3:13:45 PM -- Shutting down databases ...
6/18/2013 3:13:46 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
```

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6/18/2013 3:13:46 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.blg has 486 samples.
6/18/2013 3:13:46 PM -- Creating test report ...
6/18/2013 3:13:49 PM -- Instance3992.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:49 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.xml has 479 samples queried.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.html is saved.
6/18/2013 3:13:50 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:50 PM -- Verifying database checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:02 PM -- Verifying log checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_2.xml is saved.
6/18/2013 3:23:02 PM -- Jetstress testing ends.
6/18/2013 3:31:10 PM -- Jetstress testing begins ...
6/18/2013 3:31:10 PM -- Prepare testing begins ...
6/18/2013 3:31:15 PM -- Attaching databases ...
6/18/2013 3:31:15 PM -- Prepare testing ends.
6/18/2013 3:31:15 PM -- Dispatching transactions begins ...
```

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6/18/2013 3:31:15 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:15 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:21 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:21 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:26 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:26 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:26 PM -- Attaining prerequisites:
6/18/2013 3:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212715000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:08 PM -- Performance logging ends.
6/18/2013 6:06:56 PM -- JetInterop batch transaction stats: 49468, 49617, 50081, 49679 and 49649.
6/18/2013 6:06:56 PM -- Dispatching transactions ends.
6/18/2013 6:06:56 PM -- Shutting down databases ...
6/18/2013 6:06:58 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 6:06:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.blg has 486 samples.
6/18/2013 6:06:58 PM -- Creating test report ...
6/18/2013 6:07:01 PM -- Instance3992.1 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 21.xml has 479 samples gueried.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.html is saved.
6/18/2013 6:07:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:02 PM -- Verifying database checksums ...
```

```
6/18/2013 11:02:30 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:02:30 PM -- Performance logging ends.
6/18/2013 11:02:30 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_1.blg has 590 samples.
6/18/2013 11:02:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_1.html is saved.
6/18/2013 11:02:34 PM -- Verifying log checksums ...
6/18/2013 11:02:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (11 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (10 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 23 2 35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_2_35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_2_35.xml is saved.
6/18/2013 11:02:35 PM -- Jetstress testing ends.
6/18/2013 11:31:15 PM -- Jetstress testing begins ...
6/18/2013 11:31:15 PM -- Prepare testing begins ...
6/18/2013 11:31:21 PM -- Attaching databases ...
6/18/2013 11:31:21 PM -- Prepare testing ends.
6/18/2013 11:31:21 PM -- Dispatching transactions begins ...
6/18/2013 11:31:21 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:21 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:27 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:27 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:31 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:31 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:31 PM -- Attaining prerequisites:
6/18/2013 11:33:11 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211941000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:11 PM -- Performance logging ends.
6/20/2013 9:25:16 AM -- JetInterop batch transaction stats: 639917, 640064, 638230, 638667 and 640278.
6/20/2013 9:25:16 AM -- Dispatching transactions ends.
6/20/2013 9:25:16 AM -- Shutting down databases ...
6/20/2013 9:25:17 AM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/20/2013 9:25:17 AM -- C:\Program Files\Exchange Jetstress\Stress 2013_6_18_23_31_27.blg has 5757 samples.
6/20/2013 9:25:17 AM -- Creating test report ...
6/20/2013 9:25:43 AM -- Instance3992.1 has 13.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 11.8 for I/O Database Reads Average Latency.
```

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6/20/2013 9:25:43 AM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:43 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:43 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 27 xml has 5750 samples gueried.
```

Server 6 – JS11

Test Summary

Overall Test Result	Pass
Machine Name	JS11
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:18 PM
Test End Time	6/20/2013 9:25:20 AM
Collection Start Time	6/18/2013 11:33:22 PM
Collection End Time	6/19/2013 11:33:19 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	890.967
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745559711744
Final Database Size (bytes)	10788324835328
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

<u> </u>									
Instance304.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb								
Instance304.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb								
Instance304.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb								
Instance304.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb								
Instance304.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb								

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance304.1	12.543	2.334	112.859	65.780	33627.170	35327.312	0.000	0.954	0.000	53.876	0.000	4758.824
Instance304.2	12.425	2.193	112.434	65.524	33697.946	35325.089	0.000	0.950	0.000	53.738	0.000	4766.739
Instance304.3	12.387	2.190	112.754	65.719	33677.333	35323.929	0.000	0.955	0.000	53.864	0.000	4759.060
Instance304.4	12.508	2.016	112.363	65.488	33653.798	35327.977	0.000	0.949	0.000	53.644	0.000	4770.508
Instance304.5	12.711	1.843	112.496	65.550	33635.452	35328.915	0.000	0.954	0.000	53.807	0.000	4750.011

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance304.1	31.304	261960.284
Instance304.2	31.320	261948.579
Instance304.3	31.331	261954.766
Instance304.4	31.362	261950.450
Instance304.5	31.313	261953.909

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance304.1	1.042	232478.920
Instance304.2	1.041	232475.066
Instance304.3	1.042	232418.691
Instance304.4	1.040	232526.405
Instance304.5	1.039	232473.784

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance304.1	12.543	2.334	144.163	65.780	83208.468	35327.312	13.761	0.954	1.042	53.876	232478.920	4758.824
Instance304.2	12.425	2.193	143.754	65.524	83427.111	35325.089	13.451	0.950	1.041	53.738	232475.066	4766.739
Instance304.3	12.387	2.190	144.085	65.719	83316.272	35323.929	13.235	0.955	1.042	53.864	232418.691	4759.060
Instance304.4	12.508	2.016	143.725	65.488	83469.913	35327.977	13.899	0.949	1.040	53.644	232526.405	4770.508
Instance304.5	12.711	1.843	143.809	65.550	83349.448	35328.915	13.411	0.954	1.039	53.807	232473.784	4750.011

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.782	0.000	3.260
Available MBytes	59996.581	59849.000	60037.000
Free System Page Table Entries	33555160.888	33555097.000	33555163.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74249300.220	73945088.000	74567680.000
Pool Paged Bytes	224495841.419	223227904.000	227573760.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:56 AM -- Jetstress testing begins ...
6/18/2013 10:56:56 AM -- Prepare testing begins ...
6/18/2013 10:57:02 AM -- Attaching databases ...
6/18/2013 10:57:02 AM -- Prepare testing ends.
6/18/2013 10:57:02 AM -- Dispatching transactions begins ...
6/18/2013 10:57:02 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:02 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:08 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:08 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:12 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:12 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:12 AM -- Attaining prerequisites:
6/18/2013 10:59:40 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208623000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:35 PM -- JetInterop batch transaction stats: 28514, 28772, 28603, 28860 and 28659.
6/18/2013 1:01:36 PM -- Dispatching transactions ends.
6/18/2013 1:01:36 PM -- Shutting down databases ...
6/18/2013 1:01:37 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 1:01:37 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.blg has 489 samples.
6/18/2013 1:01:37 PM -- Creating test report ...
6/18/2013 1:01:40 PM -- Instance304.1 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:43 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:40 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:40 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:40 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.xml has 479 samples queried.
6/18/2013 1:01:41 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.html is saved.
6/18/2013 1:01:42 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:42 PM -- Verifying database checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:12 PM -- Verifying log checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_12.xml is saved.
6/18/2013 1:03:12 PM -- Jetstress testing ends.
6/18/2013 1:10:46 PM -- Jetstress testing begins ...
6/18/2013 1:10:46 PM -- Prepare testing begins ...
6/18/2013 1:10:51 PM -- Attaching databases ...
6/18/2013 1:10:51 PM -- Prepare testing ends.
6/18/2013 1:10:51 PM -- Dispatching transactions begins ...
6/18/2013 1:10:51 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:51 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:57 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:57 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:02 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:02 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:02 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212584000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:38 PM -- JetInterop batch transaction stats: 38646, 38442, 38663, 38712 and 38705.
6/18/2013 3:13:38 PM -- Dispatching transactions ends.
6/18/2013 3:13:38 PM -- Shutting down databases ...
6/18/2013 3:13:39 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.blg has 486 samples.
6/18/2013 3:13:39 PM -- Creating test report ...
```

```
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.xml has 478 samples queried.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.html is saved.
6/18/2013 3:13:44 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:44 PM -- Verifying database checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (3% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:22:55 PM -- Verifying log checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_22_55.xml is saved.
6/18/2013 3:22:55 PM -- Jetstress testing ends.
6/18/2013 3:31:03 PM -- Jetstress testing begins ...
6/18/2013 3:31:03 PM -- Prepare testing begins ...
6/18/2013 3:31:09 PM -- Attaching databases ...
6/18/2013 3:31:09 PM -- Prepare testing ends.
6/18/2013 3:31:09 PM -- Dispatching transactions begins ...
6/18/2013 3:31:09 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:09 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:15 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:15 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:20 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:20 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:20 PM -- Attaining prerequisites:
6/18/2013 3:33:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210692000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:01 PM -- Performance logging ends.
6/18/2013 6:06:46 PM -- JetInterop batch transaction stats: 47895, 47739, 48183, 48056 and 48255.
6/18/2013 6:06:46 PM -- Dispatching transactions ends.
6/18/2013 6:06:46 PM -- Shutting down databases ...
6/18/2013 6:06:47 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.blg has 485 samples.
6/18/2013 6:06:47 PM -- Creating test report ...
6/18/2013 6:06:50 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.xml has 478 samples gueried.
6/18/2013 6:06:51 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 15.html is saved.
6/18/2013 6:06:52 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:52 PM -- Verifying database checksums ...
6/18/2013 10:48:40 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:48:40 PM -- Performance logging ends.
```

```
6/18/2013 10:48:40 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.blg has 563 samples.
6/18/2013 10:48:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.html is saved.
6/18/2013 10:48:43 PM -- Verifying log checksums ...
6/18/2013 10:48:44 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_48_44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_48_44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_48_44.xml is saved.
6/18/2013 10:48:44 PM -- Jetstress testing ends.
6/18/2013 11:31:18 PM -- Jetstress testing begins ...
6/18/2013 11:31:18 PM -- Prepare testing begins ...
6/18/2013 11:31:24 PM -- Attaching databases ...
6/18/2013 11:31:24 PM -- Prepare testing ends.
6/18/2013 11:31:24 PM -- Dispatching transactions begins ...
6/18/2013 11:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:34 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:34 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:34 PM -- Attaining prerequisites:
6/18/2013 11:33:22 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208087000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:22 PM -- Performance logging ends.
6/20/2013 9:25:19 AM -- JetInterop batch transaction stats: 608115, 608020, 607589, 607483 and 607460.
6/20/2013 9:25:19 AM -- Dispatching transactions ends.
6/20/2013 9:25:19 AM -- Shutting down databases ...
6/20/2013 9:25:20 AM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/20/2013 9:25:20 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.blg has 5758 samples.
6/20/2013 9:25:20 AM -- Creating test report ...
6/20/2013 9:25:48 AM -- Instance304.1 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 12.4 for I/O Database Reads Average Latency.
```

6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 12.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:48 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:48 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.xml has 5750 samples queried.

Server 7 – JS12

Test Summary

Overall Test Result	Pass
Machine Name	JS12
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:21 PM
Test End Time	6/20/2013 9:25:24 AM
Collection Start Time	6/18/2013 11:33:33 PM
Collection End Time	6/19/2013 11:33:22 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	833.3
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745106726912
Final Database Size (bytes)	10785195884544
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3984.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3984.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3984.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3984.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3984.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3984.1	12.967	2.327	105.225	61.421	33745.133	35373.524	0.000	0.966	0.000	50.693	0.000	4750.400
Instance3984.2	13.003	2.187	105.236	61.435	33729.485	35377.099	0.000	0.961	0.000	50.715	0.000	4741.853
Instance3984.3	13.139	2.180	105.001	61.267	33784.853	35364.108	0.000	0.966	0.000	50.585	0.000	4740.564
Instance3984.4	13.081	2.019	105.343	61.493	33739.316	35370.084	0.000	0.959	0.000	50.790	0.000	4738.300
Instance3984.5	13.384	1.851	105.381	61.498	33716.762	35383.115	0.000	0.967	0.000	50.795	0.000	4730.268

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3984.1	31.325	261959.343
Instance3984.2	31.410	261950.027
Instance3984.3	31.357	261956.593
Instance3984.4	31.322	261941.443
Instance3984.5	31.271	261940.249

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3984.1	0.979	232526.505
Instance3984.2	0.977	232363.631
Instance3984.3	0.975	232357.073
Instance3984.4	0.977	232386.783
Instance3984.5	0.976	232437.775

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3984.1	12.967	2.327	136.551	61.421	86098.590	35373.524	13.512	0.966	0.979	50.693	232526.505	4750.400
Instance3984.2	13.003	2.187	136.646	61.435	86189.607	35377.099	13.151	0.961	0.977	50.715	232363.631	4741.853
Instance3984.3	13.139	2.180	136.358	61.267	86255.239	35364.108	13.318	0.966	0.975	50.585	232357.073	4740.564
Instance3984.4	13.081	2.019	136.665	61.493	86040.864	35370.084	13.371	0.959	0.977	50.790	232386.783	4738.300
Instance3984.5	13.384	1.851	136.652	61.498	85942.871	35383.115	13.561	0.967	0.976	50.795	232437.775	4730.268

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.768	0.000	3.118
Available MBytes	59985.864	59836.000	60111.000
Free System Page Table Entries	33555162.220	33555098.000	33556690.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	75126035.809	74936320.000	75689984.000
Pool Paged Bytes	224718132.215	223395840.000	226656256.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:58 AM -- Jetstress testing begins ...
6/18/2013 10:56:58 AM -- Prepare testing begins ...
6/18/2013 10:57:04 AM -- Attaching databases ...
6/18/2013 10:57:04 AM -- Prepare testing ends.
6/18/2013 10:57:04 AM -- Dispatching transactions begins ...
6/18/2013 10:57:04 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:04 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:10 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:10 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:15 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:15 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:15 AM -- Attaining prerequisites:
6/18/2013 10:59:55 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211769000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:56 PM -- Performance logging ends.
6/18/2013 1:01:38 PM -- JetInterop batch transaction stats: 27473, 27301, 27492, 27469 and 27372.
6/18/2013 1:01:38 PM -- Dispatching transactions ends.
6/18/2013 1:01:38 PM -- Shutting down databases ...
6/18/2013 1:01:39 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 1:01:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.blg has 489 samples.
6/18/2013 1:01:39 PM -- Creating test report ...
6/18/2013 1:01:43 PM -- Instance3984.1 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 9.4 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:39 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.xml has 478 samples queried.
6/18/2013 1:01:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.html is saved.
6/18/2013 1:01:45 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:45 PM -- Verifying database checksums ...
6/18/2013 1:03:15 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:16 PM -- Verifying log checksums ...
6/18/2013 1:03:16 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:\DB4 (
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_16.xml is saved.
6/18/2013 1:03:16 PM -- Jetstress testing ends.
6/18/2013 1:10:48 PM -- Jetstress testing begins ...
6/18/2013 1:10:48 PM -- Prepare testing begins ...
6/18/2013 1:10:54 PM -- Attaching databases ...
6/18/2013 1:10:54 PM -- Prepare testing ends.
6/18/2013 1:10:54 PM -- Dispatching transactions begins ...
6/18/2013 1:10:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:05 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214104000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:34 PM -- JetInterop batch transaction stats: 36569, 36311, 36550, 36376 and 36492.
6/18/2013 3:13:35 PM -- Dispatching transactions ends.
6/18/2013 3:13:35 PM -- Shutting down databases ...
6/18/2013 3:13:36 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.blg has 486 samples.
6/18/2013 3:13:36 PM -- Creating test report ...
```

```
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:39 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.xml has 478 samples gueried.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.html is saved.
6/18/2013 3:13:40 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:40 PM -- Verifying database checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:19:38 PM -- Verifying log checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_38.xml is saved.
6/18/2013 3:19:38 PM -- Jetstress testing ends.
6/18/2013 3:30:58 PM -- Jetstress testing begins ...
6/18/2013 3:30:58 PM -- Prepare testing begins ...
6/18/2013 3:31:04 PM -- Attaching databases ...
6/18/2013 3:31:04 PM -- Prepare testing ends.
6/18/2013 3:31:04 PM -- Dispatching transactions begins ...
6/18/2013 3:31:04 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:04 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:10 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:10 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:15 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:15 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:15 PM -- Attaining prerequisites:
6/18/2013 3:32:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208979000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:59 PM -- Performance logging ends.
6/18/2013 6:06:42 PM -- JetInterop batch transaction stats: 44967, 45509, 45269, 45388 and 45393.
6/18/2013 6:06:42 PM -- Dispatching transactions ends.
6/18/2013 6:06:42 PM -- Shutting down databases ...
6/18/2013 6:06:44 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 6:06:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.blg has 486 samples.
6/18/2013 6:06:44 PM -- Creating test report ...
6/18/2013 6:06:47 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.xml has 479 samples gueried.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 10.html is saved.
6/18/2013 6:06:48 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:48 PM -- Verifying database checksums ...
6/18/2013 10:55:52 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:55:52 PM -- Performance logging ends.
```

```
6/18/2013 10:55:52 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.blg has 577 samples.
6/18/2013 10:55:56 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.html is saved.
6/18/2013 10:55:56 PM -- Verifying log checksums ...
6/18/2013 10:55:57 PM -- C:\DB\DB1 (13 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (11 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_55_57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\System 2013_6_18_22_55_57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_55_57.xml is saved.
6/18/2013 10:55:57 PM -- Jetstress testing ends.
6/18/2013 11:31:21 PM -- Jetstress testing begins ...
6/18/2013 11:31:21 PM -- Prepare testing begins ...
6/18/2013 11:31:27 PM -- Attaching databases ...
6/18/2013 11:31:27 PM -- Prepare testing ends.
6/18/2013 11:31:27 PM -- Dispatching transactions begins ...
6/18/2013 11:31:27 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:27 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:33 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:33 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:37 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:37 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:37 PM -- Attaining prerequisites:
6/18/2013 11:33:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213645000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:34 PM -- Performance logging ends.
6/20/2013 9:25:22 AM -- JetInterop batch transaction stats: 570992, 569982, 569558, 571133 and 570524.
6/20/2013 9:25:22 AM -- Dispatching transactions ends.
6/20/2013 9:25:22 AM -- Shutting down databases ...
6/20/2013 9:25:24 AM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/20/2013 9:25:24 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 33.blg has 5758 samples.
6/20/2013 9:25:24 AM -- Creating test report ...
6/20/2013 9:25:55 AM -- Instance3984.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 13.1 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:55 AM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 13.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:55 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:55 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.xml has 5750 samples queried.
```

Server 8 – JS13

Test Summary

Overall Test Result	Pass
Machine Name	JS13
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:24 PM
Test End Time	6/20/2013 9:25:27 AM
Collection Start Time	6/18/2013 11:33:28 PM
Collection End Time	6/19/2013 11:33:25 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	902.161
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745593266176
Final Database Size (bytes)	10788811374592
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance376.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb						
Instance376.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb						
Instance376.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb						
Instance376.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb						
Instance376.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb						

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	12.973	2.176	113.973	66.354	33573.873	35311.792	0.000	0.933	0.000	54.551	0.000	4731.310
Instance376.2	12.497	2.065	114.294	66.535	33643.482	35303.463	0.000	0.935	0.000	54.430	0.000	4738.156
Instance376.3	12.463	2.034	113.775	66.242	33646.953	35308.881	0.000	0.932	0.000	54.384	0.000	4739.703
Instance376.4	12.059	1.879	114.084	66.447	33677.566	35321.327	0.000	0.934	0.000	54.473	0.000	4758.643
Instance376.5	12.150	1.737	114.055	66.402	33671.643	35322.070	0.000	0.931	0.000	54.457	0.000	4755.187

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance376.1	31.358	261946.299
Instance376.2	31.376	261935.282
Instance376.3	31.413	261954.473
Instance376.4	31.447	261950.366
Instance376.5	31.461	261949.441

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance376.1	1.049	232525.354
Instance376.2	1.048	232443.614
Instance376.3	1.047	232468.633
Instance376.4	1.054	232476.554
Instance376.5	1.052	232488.288

Total I/O Performance

MSExchange Database ==>	I/O Database	I/O Database	I/O Database	I/O Database	I/O Database Reads Average	I/O Database Writes Average	I/O Log Reads	I/O Log Writes	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes
Instances	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Bytes	Bytes	Average Latency (msec)	Average Latency (msec)			3 3	Average Bytes
Instance376.1	12.973	2.176	145.332	66.354	82850.019	35311.792	13.636	0.933	1.049	54.551	232525.354	4731.310
Instance376.2	12.497	2.065	145.670	66.535	82815.976	35303.463	13.467	0.935	1.048	54.430	232443.614	4738.156
Instance376.3	12.463	2.034	145.188	66.242	83043.313	35308.881	13.158	0.932	1.047	54.384	232468.633	4739.703
Instance376.4	12.059	1.879	145.531	66.447	83003.355	35321.327	13.106	0.934	1.054	54.473	232476.554	4758.643
Instance376.5	12.150	1.737	145.515	66.402	83026.013	35322.070	13.004	0.931	1.052	54.457	232488.288	4755.187

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.702	0.000	3.059
Available MBytes	59962.957	59810.000	60014.000
Free System Page Table Entries	33555162.070	33555098.000	33555612.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	77248642.693	77127680.000	77398016.000
Pool Paged Bytes	225708263.829	224690176.000	227860480.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 1:10:51 PM -- Jetstress testing begins ...
6/18/2013 1:10:51 PM -- Prepare testing begins ...
6/18/2013 1:10:56 PM -- Attaching databases ...
6/18/2013 1:10:56 PM -- Prepare testing ends.
6/18/2013 1:10:56 PM -- Dispatching transactions begins ...
6/18/2013 1:10:56 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:56 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:02 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:02 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:08 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:08 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:08 PM -- Attaining prerequisites:
6/18/2013 1:12:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212314000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:59 PM -- Performance logging ends.
6/18/2013 3:13:31 PM -- JetInterop batch transaction stats: 38705, 38814, 39021, 38453 and 38697.
6/18/2013 3:13:31 PM -- Dispatching transactions ends.
6/18/2013 3:13:31 PM -- Shutting down databases ...
6/18/2013 3:13:32 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 3:13:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.blg has 486 samples.
6/18/2013 3:13:32 PM -- Creating test report ...
6/18/2013 3:13:35 PM -- Instance376.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 6:06:42 PM -- Instance376.1 has 12.8 for I/O Database Reads Average Latency.

```
6/18/2013 3:13:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.xml has 478 samples queried.
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.html is saved.
6/18/2013 3:13:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:37 PM -- Verifying database checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:48 PM -- Verifying log checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18 15 19 48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 15 19 48.xml is saved.
6/18/2013 3:19:48 PM -- Jetstress testing ends.
6/18/2013 3:30:54 PM -- Jetstress testing begins ...
6/18/2013 3:30:54 PM -- Prepare testing begins ...
6/18/2013 3:30:59 PM -- Attaching databases ...
6/18/2013 3:30:59 PM -- Prepare testing ends.
6/18/2013 3:30:59 PM -- Dispatching transactions begins ...
6/18/2013 3:30:59 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:59 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:05 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:05 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:10 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:10 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:10 PM -- Attaining prerequisites:
6/18/2013 3:32:38 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1217004000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:38 PM -- Performance logging ends.
6/18/2013 6:06:37 PM -- JetInterop batch transaction stats: 48261, 47876, 48075, 48535 and 47826.
6/18/2013 6:06:37 PM -- Dispatching transactions ends.
6/18/2013 6:06:37 PM -- Shutting down databases ...
6/18/2013 6:06:38 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.blg has 485 samples.
6/18/2013 6:06:38 PM -- Creating test report ...
```

```
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:42 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.xml has 479 samples queried.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.html is saved.
6/18/2013 6:06:43 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:43 PM -- Verifying database checksums ...
6/18/2013 10:49:17 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:49:17 PM -- Performance logging ends.
6/18/2013 10:49:17 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_42.blg has 564 samples.
6/18/2013 10:49:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_42.html is saved.
6/18/2013 10:49:21 PM -- Verifying log checksums ...
6/18/2013 10:49:32 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 22 49 32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 22 49 32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_49_32.xml is saved.
6/18/2013 10:49:32 PM -- Jetstress testing ends.
6/18/2013 11:31:24 PM -- Jetstress testing begins ...
6/18/2013 11:31:24 PM -- Prepare testing begins ...
6/18/2013 11:31:30 PM -- Attaching databases ...
6/18/2013 11:31:30 PM -- Prepare testing ends.
6/18/2013 11:31:30 PM -- Dispatching transactions begins ...
```

```
6/18/2013 11:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:40 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:40 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:40 PM -- Attaining prerequisites:
6/18/2013 11:33:28 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210618000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:28 PM -- Performance logging ends.
6/20/2013 9:25:25 AM -- JetInterop batch transaction stats: 614214, 615393, 614395, 614415 and 615185.
6/20/2013 9:25:26 AM -- Dispatching transactions ends.
6/20/2013 9:25:26 AM -- Shutting down databases ...
6/20/2013 9:25:27 AM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/20/2013 9:25:27 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.blg has 5758 samples.
6/20/2013 9:25:27 AM -- Creating test report ...
6/20/2013 9:26:03 AM -- Instance376.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:03 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 36.xml has 5750 samples gueried.
```

Server 9 – JS14

Test Summary

Overall Test Result	Pass
Machine Name	JS14
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:27 PM
Test End Time	6/20/2013 9:25:30 AM
Collection Start Time	6/18/2013 11:33:34 PM
Collection End Time	6/19/2013 11:33:28 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_39.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	903.796
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745542934528
Final Database Size (bytes)	10788836540416
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3	3036.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb				
Instance3	3036.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb				
Instance3	3036.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb				
Instance3	3036.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb				
Instance3	3036.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb				

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3036.1	12.237	2.010	114.270	66.603	33654.526	35324.476	0.000	0.946	0.000	54.619	0.000	4763.702
Instance3036.2	12.216	2.411	113.892	66.335	33643.370	35317.685	0.000	0.951	0.000	54.250	0.000	4759.817
Instance3036.3	12.432	2.299	114.450	66.664	33643.037	35319.882	0.000	0.951	0.000	54.475	0.000	4753.454
Instance3036.4	12.505	1.975	114.283	66.531	33615.770	35310.915	0.000	0.951	0.000	54.409	0.000	4749.808
Instance3036.5	12.362	1.736	114.226	66.541	33663.311	35319.144	0.000	0.946	0.000	54.436	0.000	4754.136

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3036.1	31.522	261946.246
Instance3036.2	31.484	261950.183
Instance3036.3	31.576	261943.717
Instance3036.4	31.512	261951.632
Instance3036.5	31.495	261944.711

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3036.1	1.058	232436.424
Instance3036.2	1.050	232404.397
Instance3036.3	1.053	232409.240
Instance3036.4	1.051	232523.648
Instance3036.5	1.052	232402.165

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3036.1	12.237	2.010	145.792	66.603	83013.975	35324.476	13.163	0.946	1.058	54.619	232436.424	4763.702
Instance3036.2	12.216	2.411	145.377	66.335	83087.923	35317.685	13.284	0.951	1.050	54.250	232404.397	4759.817
Instance3036.3	12.432	2.299	146.026	66.664	83009.660	35319.882	12.887	0.951	1.053	54.475	232409.240	4753.454
Instance3036.4	12.505	1.975	145.796	66.531	82968.492	35310.915	12.686	0.951	1.051	54.409	232523.648	4749.808
Instance3036.5	12.362	1.736	145.722	66.541	83002.539	35319.144	12.866	0.946	1.052	54.436	232402.165	4754.136

Host System Performance

Counter	Average	Minimum	Maximum	
% Processor Time	0.793	0.000	3.668	
Available MBytes	59960.352	59802.000	60036.000	
Free System Page Table Entries	33555161.896	33555098.000	33555164.000	
Transition Pages RePurposed/sec	0.000	0.000	0.000	
Pool Nonpaged Bytes	76919816.013	76832768.000	77111296.000	
Pool Paged Bytes	226665159.512	225267712.000	229826560.000	
Database Page Fault Stalls/sec	0.000	0.000	0.000	

Test Log

```
6/18/2013 10:57:02 AM -- Jetstress testing begins ...
6/18/2013 10:57:02 AM -- Prepare testing begins ...
6/18/2013 10:57:08 AM -- Attaching databases ...
6/18/2013 10:57:08 AM -- Prepare testing ends.
6/18/2013 10:57:08 AM -- Dispatching transactions begins ...
6/18/2013 10:57:08 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:08 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:14 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:14 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:19 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:19 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:19 AM -- Attaining prerequisites:
6/18/2013 10:59:56 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214312000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:57 PM -- Performance logging ends.
6/18/2013 1:01:42 PM -- JetInterop batch transaction stats: 28495, 28592, 28499, 28409 and 28651.
6/18/2013 1:01:42 PM -- Dispatching transactions ends.
6/18/2013 1:01:42 PM -- Shutting down databases ...
6/18/2013 1:01:43 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.blg has 489 samples.
6/18/2013 1:01:43 PM -- Creating test report ...
6/18/2013 1:01:47 PM -- Instance3036.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:31 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.xml has 478 samples queried.
6/18/2013 1:01:48 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.html is saved.
6/18/2013 1:01:49 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:49 PM -- Verifying database checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:23 PM -- Verifying log checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:\DB4
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_23.xml is saved.
6/18/2013 1:03:23 PM -- Jetstress testing ends.
6/18/2013 1:10:53 PM -- Jetstress testing begins ...
6/18/2013 1:10:53 PM -- Prepare testing begins ...
6/18/2013 1:10:58 PM -- Attaching databases ...
6/18/2013 1:10:58 PM -- Prepare testing ends.
6/18/2013 1:10:58 PM -- Dispatching transactions begins ...
6/18/2013 1:10:58 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:58 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:04 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:04 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:09 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:09 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:09 PM -- Attaining prerequisites:
6/18/2013 1:13:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212580000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:01 PM -- Performance logging ends.
6/18/2013 3:13:27 PM -- JetInterop batch transaction stats: 38329, 38212, 38631, 38609 and 38554.
6/18/2013 3:13:27 PM -- Dispatching transactions ends.
6/18/2013 3:13:27 PM -- Shutting down databases ...
6/18/2013 3:13:28 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.blg has 486 samples.
6/18/2013 3:13:28 PM -- Creating test report ...
```

```
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:31 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.xml has 478 samples gueried.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.html is saved.
6/18/2013 3:13:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:32 PM -- Verifying database checksums ...
6/18/2013 3:19:58 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:59 PM -- Verifying log checksums ...
6/18/2013 3:19:59 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_59.xml is saved.
6/18/2013 3:19:59 PM -- Jetstress testing ends.
6/18/2013 3:30:49 PM -- Jetstress testing begins ...
6/18/2013 3:30:49 PM -- Prepare testing begins ...
6/18/2013 3:30:54 PM -- Attaching databases ...
6/18/2013 3:30:54 PM -- Prepare testing ends.
6/18/2013 3:30:54 PM -- Dispatching transactions begins ...
6/18/2013 3:30:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:05 PM -- Attaining prerequisites:
6/18/2013 3:32:26 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208418000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:26 PM -- Performance logging ends.
6/18/2013 6:06:33 PM -- JetInterop batch transaction stats: 48153, 48521, 48670, 48815 and 48195.
6/18/2013 6:06:33 PM -- Dispatching transactions ends.
6/18/2013 6:06:33 PM -- Shutting down databases ...
6/18/2013 6:06:34 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.blg has 484 samples.
6/18/2013 6:06:34 PM -- Creating test report ...
6/18/2013 6:06:37 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:37 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:37 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.xml has 478 samples gueried.
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 0.html is saved.
6/18/2013 6:06:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:39 PM -- Verifying database checksums ...
6/18/2013 10:50:22 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:50:22 PM -- Performance logging ends.
```

```
6/18/2013 10:50:22 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_38.blg has 567 samples.
6/18/2013 10:50:26 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_38.html is saved.
6/18/2013 10:50:26 PM -- Verifying log checksums ...
6/18/2013 10:50:27 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_50_27.evt is saved.
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_50_27.evt is saved.
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_50_27.xml is saved.
6/18/2013 10:50:27 PM -- Jetstress testing ends.
6/18/2013 11:31:27 PM -- Jetstress testing begins ...
6/18/2013 11:31:27 PM -- Prepare testing begins ...
6/18/2013 11:31:33 PM -- Attaching databases ...
6/18/2013 11:31:33 PM -- Prepare testing ends.
6/18/2013 11:31:33 PM -- Dispatching transactions begins ...
6/18/2013 11:31:33 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:33 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:39 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:39 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:43 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:43 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:43 PM -- Attaining prerequisites:
6/18/2013 11:33:34 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209827000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:34 PM -- Performance logging ends.
6/20/2013 9:25:28 AM -- JetInterop batch transaction stats: 616595, 615782, 616827, 616186 and 615223.
6/20/2013 9:25:29 AM -- Dispatching transactions ends.
6/20/2013 9:25:29 AM -- Shutting down databases ...
6/20/2013 9:25:30 AM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/20/2013 9:25:30 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 39.blg has 5758 samples.
6/20/2013 9:25:30 AM -- Creating test report ...
6/20/2013 9:26:07 AM -- Instance3036.1 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.3 has 12.4 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:26:07 AM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:07 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:07 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_39.xml has 5750 samples queried.
```

Server 10 – JS15

Test Summary

Overall Test Result	Pass
Machine Name	JS15
Test Description	5000 users/server
	10 servers
	2GB mailboxes .15 IOPS/user
	.18 IOPS tested
	5 dbs per server
	2200GB db/log combined volumes
	2 copies
	5 threads/db
Test Start Time	6/18/2013 11:31:30 PM
Test End Time	6/20/2013 9:25:33 AM
Collection Start Time	6/18/2013 11:33:44 PM
Collection End Time	6/19/2013 11:33:32 PM
Jetstress Version	14.01.0180.003
Ese Version	14.03.0123.002
Operating System	Windows Server 2008 R2 Enterprise Service Pack 1 (6.1.7601.65536)
Performance Log	C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.blg

Database Sizing and Throughput

Achieved Transactional I/O per Second	832.063
Target Transactional I/O per Second	750
Initial Database Size (bytes)	10745006063616
Final Database Size (bytes)	10785070055424
Database Files (Count)	5

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%
Run Background Database Maintenance	True
Number of Copies per Database	2

Database Configuration

Instance3368.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb							
Instance3368.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb							
Instance3368.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb							
Instance3368.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb							
Instance3368.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb							

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3368.1	12.646	2.461	105.085	61.327	33829.028	35368.518	0.000	0.957	0.000	50.451	0.000	4744.274
Instance3368.2	12.900	2.277	104.827	61.181	33776.343	35365.648	0.000	0.959	0.000	50.413	0.000	4741.226
Instance3368.3	12.714	2.115	105.218	61.429	33812.938	35366.379	0.000	0.951	0.000	50.602	0.000	4740.663
Instance3368.4	14.195	2.013	105.239	61.431	33617.442	35371.927	0.000	0.958	0.000	50.863	0.000	4717.873
Instance3368.5	12.980	1.831	105.028	61.297	33780.651	35383.635	0.000	0.952	0.000	50.608	0.000	4734.781

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3368.1	31.353	261961.269
Instance3368.2	31.339	261948.805
Instance3368.3	31.416	261941.628
Instance3368.4	31.311	261938.612
Instance3368.5	31.326	261937.487

Log Replication I/O Performance

MSExchange Database ==> Instances	I/O Log Reads/sec	I/O Log Reads Average Bytes
Instance3368.1	0.973	232400.124
Instance3368.2	0.971	232351.949
Instance3368.3	0.975	232117.056
Instance3368.4	0.975	232470.918
Instance3368.5	0.973	232276.990

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3368.1	12.646	2.461	136.439	61.327	86253.052	35368.518	13.128	0.957	0.973	50.451	232400.124	4744.274
Instance3368.2	12.900	2.277	136.166	61.181	86291.682	35365.648	13.388	0.959	0.971	50.413	232351.949	4741.226
Instance3368.3	12.714	2.115	136.635	61.429	86266.470	35366.379	12.951	0.951	0.975	50.602	232117.056	4740.663
Instance3368.4	14.195	2.013	136.550	61.431	85971.073	35371.927	14.413	0.958	0.975	50.863	232470.918	4717.873
Instance3368.5	12.980	1.831	136.355	61.297	86197.825	35383.635	13.667	0.952	0.973	50.608	232276.990	4734.781

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.765	0.000	3.350
Available MBytes	59961.559	59765.000	60119.000
Free System Page Table Entries	33555159.582	33555094.000	33555164.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74875969.703	74690560.000	75280384.000
Pool Paged Bytes	226003111.729	224817152.000	227819520.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:57:05 AM -- Jetstress testing begins ...
6/18/2013 10:57:05 AM -- Prepare testing begins ...
6/18/2013 10:57:11 AM -- Attaching databases ...
6/18/2013 10:57:11 AM -- Prepare testing ends.
6/18/2013 10:57:11 AM -- Dispatching transactions begins ...
6/18/2013 10:57:11 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:11 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:17 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:17 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:22 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:22 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:22 AM -- Attaining prerequisites:
6/18/2013 11:00:09 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1216705000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:00:10 PM -- Performance logging ends.
6/18/2013 1:01:44 PM -- JetInterop batch transaction stats: 27048, 27032, 26988, 26878 and 26468.
6/18/2013 1:01:44 PM -- Dispatching transactions ends.
6/18/2013 1:01:44 PM -- Shutting down databases ...
6/18/2013 1:01:45 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 1:01:45 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.blg has 490 samples.
6/18/2013 1:01:45 PM -- Creating test report ...
6/18/2013 1:01:50 PM -- Instance3368.1 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:27 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.xml has 478 samples queried.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.html is saved.
6/18/2013 1:01:51 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:51 PM -- Verifying database checksums ...
6/18/2013 1:03:26 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:27 PM -- Verifying log checksums ...
6/18/2013 1:03:27 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013_6_18_13_3_27.xml is saved.
6/18/2013 1:03:27 PM -- Jetstress testing ends.
6/18/2013 1:10:56 PM -- Jetstress testing begins ...
6/18/2013 1:10:56 PM -- Prepare testing begins ...
6/18/2013 1:11:01 PM -- Attaching databases ...
6/18/2013 1:11:01 PM -- Prepare testing ends.
6/18/2013 1:11:01 PM -- Dispatching transactions begins ...
6/18/2013 1:11:01 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:11:01 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:07 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:07 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:12 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:12 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:12 PM -- Attaining prerequisites:
6/18/2013 1:13:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209389000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:04 PM -- Performance logging ends.
6/18/2013 3:13:23 PM -- JetInterop batch transaction stats: 35518, 35669, 35556, 35802 and 35966.
6/18/2013 3:13:23 PM -- Dispatching transactions ends.
6/18/2013 3:13:23 PM -- Shutting down databases ...
6/18/2013 3:13:24 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 3:13:24 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.blg has 486 samples.
6/18/2013 3:13:24 PM -- Creating test report ...
```

```
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 14.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.xml has 478 samples queried.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.html is saved.
6/18/2013 3:13:29 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:29 PM -- Verifying database checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:20:18 PM -- Verifying log checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_20_18.xml is saved.
6/18/2013 3:20:18 PM -- Jetstress testing ends.
6/18/2013 3:30:44 PM -- Jetstress testing begins ...
6/18/2013 3:30:44 PM -- Prepare testing begins ...
6/18/2013 3:30:50 PM -- Attaching databases ...
6/18/2013 3:30:50 PM -- Prepare testing ends.
6/18/2013 3:30:50 PM -- Dispatching transactions begins ...
6/18/2013 3:30:50 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:50 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:30:56 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:30:56 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:00 PM -- Attaining prerequisites:
6/18/2013 3:32:27 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211609000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:28 PM -- Performance logging ends.
6/18/2013 6:06:29 PM -- JetInterop batch transaction stats: 44740, 45056, 44895, 45109 and 44950.
6/18/2013 6:06:29 PM -- Dispatching transactions ends.
6/18/2013 6:06:29 PM -- Shutting down databases ...
6/18/2013 6:06:31 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 6:06:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.blg has 485 samples.
6/18/2013 6:06:31 PM -- Creating test report ...
6/18/2013 6:06:34 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 12.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 14.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.xml has 479 samples gueried.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 30 56.html is saved.
6/18/2013 6:06:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:35 PM -- Verifying database checksums ...
6/18/2013 11:00:55 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:00:55 PM -- Performance logging ends.
```

```
6/18/2013 11:00:55 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.blg has 588 samples.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.html is saved.
6/18/2013 11:00:59 PM -- Verifying log checksums ...
6/18/2013 11:00:59 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_0_59.xml is saved.
6/18/2013 11:00:59 PM -- Jetstress testing ends.
6/18/2013 11:31:30 PM -- Jetstress testing begins ...
6/18/2013 11:31:30 PM -- Prepare testing begins ...
6/18/2013 11:31:36 PM -- Attaching databases ...
6/18/2013 11:31:36 PM -- Prepare testing ends.
6/18/2013 11:31:36 PM -- Dispatching transactions begins ...
6/18/2013 11:31:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:47 PM -- Attaining prerequisites:
6/18/2013 11:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210147000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:45 PM -- Performance logging ends.
6/20/2013 9:25:31 AM -- JetInterop batch transaction stats: 570046, 568431, 569389, 570233 and 570725.
6/20/2013 9:25:31 AM -- Dispatching transactions ends.
6/20/2013 9:25:31 AM -- Shutting down databases ...
6/20/2013 9:25:33 AM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/20/2013 9:25:33 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 42.blg has 5758 samples.
6/20/2013 9:25:33 AM -- Creating test report ...
6/20/2013 9:26:08 AM -- Instance3368.1 has 12.6 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 12.9 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 12.7 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:26:08 AM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:08 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:08 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.xml has 5750 samples queried.
```

Appendix C: Backup testing

Server 1 – JS6

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance2792.1	2058092.09	05:36:40	101.88
Instance2792.2	2058076.09	05:29:45	104.02
Instance2792.3	2058084.09	05:39:12	101.12
Instance2792.4	2058084.09	05:38:43	101.27
Instance2792.5	2058100.09	05:43:34	99.84

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Database Configuration

Instance2792.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2792.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2792.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2792.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	3.909	0.000	407.393	0.000	262143.997	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2792.2	3.794	0.000	415.964	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2792.3	3.987	0.000	404.279	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2792.4	3.979	0.000	404.843	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2792.5	4.007	0.000	399.093	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.816	0.000	2.000
Available MBytes	29948.229	29817.000	29951.000
Free System Page Table Entries	33555157.926	33555094.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	93711727.207	93671424.000	93757440.000
Pool Paged Bytes	232666801.633	232017920.000	234975232.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:39 AM -- Jetstress testing begins ...
6/18/2013 10:56:39 AM -- Prepare testing begins ...
6/18/2013 10:56:45 AM -- Attaching databases ...
6/18/2013 10:56:45 AM -- Prepare testing ends.
6/18/2013 10:56:45 AM -- Dispatching transactions begins ...
6/18/2013 10:56:45 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:45 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:51 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:51 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:56:57 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:56:57 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:56:57 AM -- Attaining prerequisites:
6/18/2013 10:59:17 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210290000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:17 PM -- Performance logging ends.
6/18/2013 1:01:23 PM -- JetInterop batch transaction stats: 29405, 29337, 29553, 29188 and 29402.
6/18/2013 1:01:23 PM -- Dispatching transactions ends.
6/18/2013 1:01:23 PM -- Shutting down databases ...
6/18/2013 1:01:25 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 1:01:25 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.blg has 488 samples.
6/18/2013 1:01:25 PM -- Creating test report ...
6/18/2013 1:01:28 PM -- Instance2792.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:11 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.xml has 478 samples queried.
6/18/2013 1:01:29 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.html is saved.
6/18/2013 1:01:30 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:30 PM -- Verifying database checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:43 PM -- Verifying log checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_44.xml is saved.
6/18/2013 1:02:44 PM -- Jetstress testing ends.
6/18/2013 1:10:31 PM -- Jetstress testing begins ...
6/18/2013 1:10:31 PM -- Prepare testing begins ...
6/18/2013 1:10:36 PM -- Attaching databases ...
6/18/2013 1:10:36 PM -- Prepare testing ends.
6/18/2013 1:10:36 PM -- Dispatching transactions begins ...
6/18/2013 1:10:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:47 PM -- Attaining prerequisites:
6/18/2013 1:12:17 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213207000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:18 PM -- Performance logging ends.
6/18/2013 3:14:07 PM -- JetInterop batch transaction stats: 40799, 40518, 40863, 40517 and 40635.
6/18/2013 3:14:07 PM -- Dispatching transactions ends.
6/18/2013 3:14:07 PM -- Shutting down databases ...
6/18/2013 3:14:08 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 3:14:08 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.blg has 485 samples.
6/18/2013 3:14:08 PM -- Creating test report ...
```

```
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:11 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.xml has 478 samples queried.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.html is saved.
6/18/2013 3:14:13 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:13 PM -- Verifying database checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:45 PM -- Verifying log checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_45.xml is saved.
6/18/2013 3:23:45 PM -- Jetstress testing ends.
6/18/2013 3:31:43 PM -- Jetstress testing begins ...
6/18/2013 3:31:43 PM -- Prepare testing begins ...
6/18/2013 3:31:48 PM -- Attaching databases ...
6/18/2013 3:31:48 PM -- Prepare testing ends.
6/18/2013 3:31:48 PM -- Dispatching transactions begins ...
6/18/2013 3:31:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:55 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:55 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:32:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:32:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:32:00 PM -- Attaining prerequisites:
6/18/2013 3:33:50 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215541000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:51 PM -- Performance logging ends.
6/18/2013 6:07:18 PM -- JetInterop batch transaction stats: 49701, 50075, 49817, 49657 and 50057.
6/18/2013 6:07:19 PM -- Dispatching transactions ends.
6/18/2013 6:07:19 PM -- Shutting down databases ...
6/18/2013 6:07:20 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/18/2013 6:07:20 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.blg has 486 samples.
6/18/2013 6:07:20 PM -- Creating test report ...
6/18/2013 6:07:23 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:23 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.xml has 478 samples gueried.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 55.html is saved.
6/18/2013 6:07:24 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:24 PM -- Verifying database checksums ...
6/18/2013 10:35:18 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:35:18 PM -- Performance logging ends.
```

```
6/18/2013 10:35:18 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_23.blg has 535 samples.
6/18/2013 10:35:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_23.html is saved.
6/18/2013 10:35:21 PM -- Verifying log checksums ...
6/18/2013 10:35:23 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_35_23.evt is saved.
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_35_23.evt is saved.
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_35_23.xml is saved.
6/18/2013 10:35:23 PM -- Jetstress testing ends.
6/18/2013 11:31:02 PM -- Jetstress testing begins ...
6/18/2013 11:31:02 PM -- Prepare testing begins ...
6/18/2013 11:31:07 PM -- Attaching databases ...
6/18/2013 11:31:07 PM -- Prepare testing ends.
6/18/2013 11:31:07 PM -- Dispatching transactions begins ...
6/18/2013 11:31:07 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:07 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:13 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:13 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:18 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:18 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:18 PM -- Attaining prerequisites:
6/18/2013 11:32:48 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209364000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:32:49 PM -- Performance logging ends.
6/20/2013 9:25:01 AM -- JetInterop batch transaction stats: 634110, 632373, 632533, 632135 and 632684.
6/20/2013 9:25:02 AM -- Dispatching transactions ends.
6/20/2013 9:25:02 AM -- Shutting down databases ...
6/20/2013 9:25:03 AM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and Instance2792.5
(complete)
6/20/2013 9:25:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 13.blg has 5757 samples.
6/20/2013 9:25:03 AM -- Creating test report ...
6/20/2013 9:25:31 AM -- Instance2792.1 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 12.1 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:31 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:31 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_13.xml has 5750 samples queried.
6/20/2013 9:25:31 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_13.html is saved.
6/20/2013 9:25:32 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:32 AM -- Verifying database checksums ...
6/20/2013 2:03:49 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:03:49 PM -- Performance logging ends.
6/20/2013 2:03:49 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_31.blg has 556 samples.
6/20/2013 2:03:52 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_31.html is saved.
6/20/2013 2:03:52 PM -- Verifying log checksums ...
6/20/2013 2:03:54 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (13 log(s) processed)
and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 3 54.evt is saved.
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_3_54.evt is saved.
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 20 14 3 54.xml is saved.
6/20/2013 2:03:54 PM -- Jetstress testing ends.
6/20/2013 3:52:12 PM -- Jetstress testing begins ...
6/20/2013 3:52:12 PM -- Prepare testing begins ...
6/20/2013 3:52:17 PM -- Attaching databases ...
6/20/2013 3:52:17 PM -- Prepare testing ends.
6/20/2013 3:52:26 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:26 PM -- Backing up databases ...
6/20/2013 9:36:01 PM -- Performance logging ends.
6/20/2013 9:36:01 PM -- Instance2792.1 (100% processed), Instance2792.2 (100% processed), Instance2792.3 (100% processed), Instance2792.4 (100% processed)
processed) and Instance2792.5 (100% processed)
6/20/2013 9:36:01 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_17.blg has 686 samples.
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

6/20/2013 9:36:01 PM -- Creating test report ...

Server 2 – JS7

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance2224.1	2058196.09	05:39:35	101.01
Instance2224.2	2058188.09	05:39:39	100.99
Instance2224.3	2058236.09	05:43:09	99.97
Instance2224.4	2058164.09	05:32:11	103.26
Instance2224.5	2058220.09	05:35:32	102.24

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Database Configuration

Instance2224.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2224.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2224.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2224.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Instance2224.5	Log Path: C:\DB\DB5
	Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	3.944	0.000	403.961	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2224.2	3.986	0.000	403.744	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2224.3	4.014	0.000	399.644	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2224.4	3.914	0.000	412.965	0.000	262143.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance2224.5	3.851	0.000	408.842	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.818	0.000	2.307
Available MBytes	29941.215	29913.000	29944.000
Free System Page Table Entries	33555670.032	33555670.000	33555672.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	89272373.816	89255936.000	89358336.000
Pool Paged Bytes	222134840.058	221319168.000	224251904.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:43 AM -- Jetstress testing begins ...
6/18/2013 10:56:43 AM -- Prepare testing begins ...
6/18/2013 10:56:49 AM -- Attaching databases ...
6/18/2013 10:56:49 AM -- Prepare testing ends.
6/18/2013 10:56:49 AM -- Dispatching transactions begins ...
6/18/2013 10:56:49 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:49 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:55 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:55 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:00 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:00 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:00 AM -- Attaining prerequisites:
6/18/2013 10:59:23 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212850000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:24 PM -- Performance logging ends.
6/18/2013 1:01:26 PM -- JetInterop batch transaction stats: 29643, 29265, 29554, 29573 and 29758.
6/18/2013 1:01:26 PM -- Dispatching transactions ends.
6/18/2013 1:01:26 PM -- Shutting down databases ...
6/18/2013 1:01:27 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 1:01:27 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.blg has 488 samples.
6/18/2013 1:01:27 PM -- Creating test report ...
6/18/2013 1:01:30 PM -- Instance2224.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:06 PM -- Instance2224.1 has 12.0 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:30 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:30 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.xml has 478 samples queried.
6/18/2013 1:01:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.html is saved.
6/18/2013 1:01:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:32 PM -- Verifying database checksums ...
6/18/2013 1:02:45 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:46 PM -- Verifying log checksums ...
6/18/2013 1:02:46 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_46.xml is saved.
6/18/2013 1:02:46 PM -- Jetstress testing ends.
6/18/2013 1:10:33 PM -- Jetstress testing begins ...
6/18/2013 1:10:33 PM -- Prepare testing begins ...
6/18/2013 1:10:39 PM -- Attaching databases ...
6/18/2013 1:10:39 PM -- Prepare testing ends.
6/18/2013 1:10:39 PM -- Dispatching transactions begins ...
6/18/2013 1:10:39 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:39 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:45 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:45 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:49 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:49 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:49 PM -- Attaining prerequisites:
6/18/2013 1:12:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214808000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:21 PM -- Performance logging ends.
6/18/2013 3:14:02 PM -- JetInterop batch transaction stats: 40566, 40795, 40522, 40949 and 40868.
6/18/2013 3:14:02 PM -- Dispatching transactions ends.
6/18/2013 3:14:02 PM -- Shutting down databases ...
6/18/2013 3:14:03 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 3:14:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.blg has 485 samples.
6/18/2013 3:14:03 PM -- Creating test report ...
```

```
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.xml has 478 samples gueried.
6/18/2013 3:14:07 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.html is saved.
6/18/2013 3:14:08 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:08 PM -- Verifying database checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (4%
processed)
6/18/2013 3:23:37 PM -- Verifying log checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_37.xml is saved.
6/18/2013 3:23:37 PM -- Jetstress testing ends.
6/18/2013 3:31:36 PM -- Jetstress testing begins ...
6/18/2013 3:31:36 PM -- Prepare testing begins ...
6/18/2013 3:31:42 PM -- Attaching databases ...
6/18/2013 3:31:42 PM -- Prepare testing ends.
6/18/2013 3:31:42 PM -- Dispatching transactions begins ...
6/18/2013 3:31:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:47 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:47 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:53 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:53 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:53 PM -- Attaining prerequisites:
6/18/2013 3:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215050000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:44 PM -- Performance logging ends.
6/18/2013 6:07:13 PM -- JetInterop batch transaction stats: 50126, 50577, 50218, 50339 and 50236.
6/18/2013 6:07:14 PM -- Dispatching transactions ends.
6/18/2013 6:07:14 PM -- Shutting down databases ...
6/18/2013 6:07:15 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/18/2013 6:07:15 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.blg has 486 samples.
6/18/2013 6:07:15 PM -- Creating test report ...
6/18/2013 6:07:18 PM -- Instance2224.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:18 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.xml has 478 samples gueried.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 47.html is saved.
6/18/2013 6:07:19 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:19 PM -- Verifying database checksums ...
6/18/2013 10:37:31 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:37:31 PM -- Performance logging ends.
```

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6/18/2013 10:37:31 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.blg has 540 samples.
6/18/2013 10:37:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.html is saved.
6/18/2013 10:37:34 PM -- Verifying log checksums ...
6/18/2013 10:37:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_37_36.xml is saved.
6/18/2013 10:37:36 PM -- Jetstress testing ends.
6/18/2013 11:31:06 PM -- Jetstress testing begins ...
6/18/2013 11:31:06 PM -- Prepare testing begins ...
6/18/2013 11:31:11 PM -- Attaching databases ...
6/18/2013 11:31:11 PM -- Prepare testing ends.
6/18/2013 11:31:11 PM -- Dispatching transactions begins ...
6/18/2013 11:31:11 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:11 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:17 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:17 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:23 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:23 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:23 PM -- Attaining prerequisites:
6/18/2013 11:32:55 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210425000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:32:55 PM -- Performance logging ends.
6/20/2013 9:25:06 AM -- JetInterop batch transaction stats: 640059, 639149, 641340, 638945 and 639845.
6/20/2013 9:25:06 AM -- Dispatching transactions ends.
6/20/2013 9:25:06 AM -- Shutting down databases ...
6/20/2013 9:25:07 AM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and Instance2224.5
(complete)
6/20/2013 9:25:07 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 17.blg has 5757 samples.
6/20/2013 9:25:07 AM -- Creating test report ...
6/20/2013 9:25:32 AM -- Instance2224.1 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 12.2 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:32 AM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:32 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:32 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.xml has 5750 samples queried.
6/20/2013 9:25:32 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.html is saved.
6/20/2013 9:25:33 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:33 AM -- Verifying database checksums ...
6/20/2013 2:05:47 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:05:47 PM -- Performance logging ends.
6/20/2013 2:05:47 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_32.blg has 560 samples.
6/20/2013 2:05:51 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_32.html is saved.
6/20/2013 2:05:51 PM -- Verifying log checksums ...
6/20/2013 2:05:52 PM -- C:\DB\DB1 (13 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 5 52.evt is saved.
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_5_52.evt is saved.
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_5_52.xml is saved.
6/20/2013 2:05:52 PM -- Jetstress testing ends.
6/20/2013 3:52:14 PM -- Jetstress testing begins ...
6/20/2013 3:52:14 PM -- Prepare testing begins ...
6/20/2013 3:52:20 PM -- Attaching databases ...
6/20/2013 3:52:20 PM -- Prepare testing ends.
6/20/2013 3:52:28 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:28 PM -- Backing up databases ...
6/20/2013 9:35:37 PM -- Performance logging ends.
6/20/2013 9:35:37 PM -- Instance2224.1 (100% processed), Instance2224.2 (100% processed), Instance2224.3 (100% processed), Instance2224.4 (100% processed), Instance2224.3 (100% processed), Instance2224.4 (100% processed), Instance2224.3 (100% processed), Instance2
processed) and Instance2224.5 (100% processed)
6/20/2013 9:35:37 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_20.blg has 685 samples.
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

6/20/2013 9:35:37 PM -- Creating test report ...

Server 3 – JS8

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance3352.1	2058060.09	05:31:18	103.53
Instance3352.2	2058044.09	05:04:20	112.71
Instance3352.3	2058060.09	05:01:24	113.80
Instance3352.4	2058068.09	05:03:37	112.98
Instance3352.5	2058060.09	05:06:45	111.82

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance3352.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3352.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3352.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3352.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Instance3352.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	3.715	0.000	414.055	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3352.2	3.460	0.000	450.695	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3352.3	3.446	0.000	455.188	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3352.4	3.397	0.000	451.792	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3352.5	3.452	0.000	447.363	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Counter	Average	Minimum	Maximum
% Processor Time	1.149	0.000	2.031
Available MBytes	29953.846	29823.000	29957.000
Free System Page Table Entries	33555668.921	33555605.000	33555671.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	91673065.537	91652096.000	91717632.000
Pool Paged Bytes	233705918.160	232882176.000	235798528.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

```
6/18/2013 10:56:47 AM -- Jetstress testing begins ...
6/18/2013 10:56:47 AM -- Prepare testing begins ...
6/18/2013 10:56:53 AM -- Attaching databases ...
6/18/2013 10:56:53 AM -- Prepare testing ends.
6/18/2013 10:56:53 AM -- Dispatching transactions begins ...
6/18/2013 10:56:53 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:53 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:59 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:59 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:05 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:05 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:05 AM -- Attaining prerequisites:
6/18/2013 10:59:35 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1219310000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:36 PM -- Performance logging ends.
6/18/2013 1:01:30 PM -- JetInterop batch transaction stats: 28755, 28320, 28835, 28726 and 28827.
6/18/2013 1:01:30 PM -- Dispatching transactions ends.
6/18/2013 1:01:30 PM -- Shutting down databases ...
6/18/2013 1:01:32 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 1:01:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.blg has 489 samples.
6/18/2013 1:01:32 PM -- Creating test report ...
6/18/2013 1:01:35 PM -- Instance3352.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:14:01 PM -- Instance3352.1 has 13.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.xml has 479 samples queried.
6/18/2013 1:01:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.html is saved.
6/18/2013 1:01:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:37 PM -- Verifying database checksums ...
6/18/2013 1:02:50 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:51 PM -- Verifying log checksums ...
6/18/2013 1:02:51 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 2 51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 13 2 51.xml is saved.
6/18/2013 1:02:51 PM -- Jetstress testing ends.
6/18/2013 1:10:36 PM -- Jetstress testing begins ...
6/18/2013 1:10:36 PM -- Prepare testing begins ...
6/18/2013 1:10:42 PM -- Attaching databases ...
6/18/2013 1:10:42 PM -- Prepare testing ends.
6/18/2013 1:10:42 PM -- Dispatching transactions begins ...
6/18/2013 1:10:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:48 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:48 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:52 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:52 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:52 PM -- Attaining prerequisites:
6/18/2013 1:12:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214845000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:56 PM -- JetInterop batch transaction stats: 39626, 39706, 39573, 39658 and 39994.
6/18/2013 3:13:56 PM -- Dispatching transactions ends.
6/18/2013 3:13:56 PM -- Shutting down databases ...
6/18/2013 3:13:58 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 3:13:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.blg has 485 samples.
6/18/2013 3:13:58 PM -- Creating test report ...
```

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6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.xml has 478 samples queried.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.html is saved.
6/18/2013 3:14:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:02 PM -- Verifying database checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:26 PM -- Verifying log checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_26.xml is saved.
6/18/2013 3:23:26 PM -- Jetstress testing ends.
6/18/2013 3:31:24 PM -- Jetstress testing begins ...
6/18/2013 3:31:24 PM -- Prepare testing begins ...
6/18/2013 3:31:30 PM -- Attaching databases ...
6/18/2013 3:31:30 PM -- Prepare testing ends.
6/18/2013 3:31:30 PM -- Dispatching transactions begins ...
6/18/2013 3:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:41 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:41 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:41 PM -- Attaining prerequisites:
6/18/2013 3:33:25 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211384000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:25 PM -- Performance logging ends.
6/18/2013 6:07:01 PM -- JetInterop batch transaction stats: 49011, 49241, 49179, 49282 and 49742.
6/18/2013 6:07:01 PM -- Dispatching transactions ends.
6/18/2013 6:07:01 PM -- Shutting down databases ...
6/18/2013 6:07:03 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/18/2013 6:07:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.blg has 486 samples.
6/18/2013 6:07:03 PM -- Creating test report ...
6/18/2013 6:07:06 PM -- Instance3352.1 has 13.3 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.xml has 479 samples gueried.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 36.html is saved.
6/18/2013 6:07:07 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:07 PM -- Verifying database checksums ...
6/18/2013 11:04:43 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:04:43 PM -- Performance logging ends.
```

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6/18/2013 11:04:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_6.blg has 594 samples.
6/18/2013 11:04:47 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_6.html is saved.
6/18/2013 11:04:47 PM -- Verifying log checksums ...
6/18/2013 11:04:48 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_4_48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_4_48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_4_48.xml is saved.
6/18/2013 11:04:48 PM -- Jetstress testing ends.
6/18/2013 11:31:08 PM -- Jetstress testing begins ...
6/18/2013 11:31:08 PM -- Prepare testing begins ...
6/18/2013 11:31:14 PM -- Attaching databases ...
6/18/2013 11:31:14 PM -- Prepare testing ends.
6/18/2013 11:31:14 PM -- Dispatching transactions begins ...
6/18/2013 11:31:14 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:14 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:20 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:20 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:25 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:25 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:25 PM -- Attaining prerequisites:
6/18/2013 11:33:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212363000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:04 PM -- Performance logging ends.
6/20/2013 9:25:09 AM -- JetInterop batch transaction stats: 634106, 632752, 634222, 633891 and 633650.
6/20/2013 9:25:09 AM -- Dispatching transactions ends.
6/20/2013 9:25:09 AM -- Shutting down databases ...
6/20/2013 9:25:11 AM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and Instance3352.5
(complete)
6/20/2013 9:25:11 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 20.blg has 5757 samples.
6/20/2013 9:25:11 AM -- Creating test report ...
6/20/2013 9:25:37 AM -- Instance3352.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
```

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6/20/2013 9:25:37 AM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 11.9 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:37 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:37 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.xml has 5750 samples queried.
6/20/2013 9:25:37 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.html is saved.
6/20/2013 9:25:38 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:38 AM -- Verifying database checksums ...
6/20/2013 2:32:35 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:32:35 PM -- Performance logging ends.
6/20/2013 2:32:35 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_37.blg has 613 samples.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_37.html is saved.
6/20/2013 2:32:40 PM -- Verifying log checksums ...
6/20/2013 2:32:40 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (13 log(s) processed), C:\DB\DB4 (11 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 32 40.evt is saved.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_32_40.evt is saved.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_32_40.xml is saved.
6/20/2013 2:32:40 PM -- Jetstress testing ends.
6/20/2013 3:52:17 PM -- Jetstress testing begins ...
6/20/2013 3:52:17 PM -- Prepare testing begins ...
6/20/2013 3:52:22 PM -- Attaching databases ...
6/20/2013 3:52:22 PM -- Prepare testing ends.
6/20/2013 3:52:31 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:31 PM -- Backing up databases ...
6/20/2013 9:23:49 PM -- Performance logging ends.
6/20/2013 9:23:49 PM -- Instance3352.1 (100% processed), Instance3352.2 (100% processed), Instance3352.3 (100% processed), Instance3352.4 (100% processed)
processed) and Instance3352.5 (100% processed)
6/20/2013 9:23:49 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_22.blg has 661 samples.
6/20/2013 9:23:49 PM -- Creating test report ...
```

Server 4 – JS9

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance1424.1	2058148.09	05:27:40	104.68
Instance1424.2	2058196.09	05:02:04	113.56
Instance1424.3	2058156.09	05:00:51	114.02
Instance1424.4	2058180.09	05:03:43	112.94
Instance1424.5	2058180.09	04:53:25	116.90

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance1424.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance1424.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance1424.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance1424.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database	I/O	I/O	I/O	I/O	I/O Database	I/O	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log
==> Instances	Database	Database	Database	Database	Reads Average	Database	Reads	Writes	Reads/sec	Writes/sec	Reads	Writes
	Reads	Writes	Reads/sec	Writes/sec	Bytes	Writes	Average	Average			Average	Average
	Average	Average Latency				Average	Latency (msec)	Latency (msec)			Bytes	Bytes
	Latency (msec)	(msec)				Bytes	(msec)	(Hisec)				
Instance1424.1	3.591	0.000	418.658	0.000	262144.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance1424.2	3.365	0.000	454.167	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance1424.3	3.440	0.000	456.062	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance1424.4	3.387	0.000	451.711	0.000	262143.997	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance1424.5	3.348	0.000	467.638	0.000	262143.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Counter	Average	Minimum	Maximum
% Processor Time	1.122	0.000	2.291
Available MBytes	29902.902	29699.000	29906.000
Free System Page Table Entries	33555669.758	33555606.000	33555672.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	83372119.682	83353600.000	83427328.000
Pool Paged Bytes	244398988.135	243744768.000	246681600.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

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6/18/2013 10:56:51 AM -- Jetstress testing begins ...
6/18/2013 10:56:51 AM -- Prepare testing begins ...
6/18/2013 10:56:58 AM -- Attaching databases ...
6/18/2013 10:56:58 AM -- Prepare testing ends.
6/18/2013 10:56:58 AM -- Dispatching transactions begins ...
6/18/2013 10:56:58 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:58 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:04 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:04 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:08 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:08 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:08 AM -- Attaining prerequisites:
6/18/2013 10:59:41 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209700000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:28 PM -- JetInterop batch transaction stats: 28950, 29007, 29113, 28462 and 29068.
6/18/2013 1:01:28 PM -- Dispatching transactions ends.
6/18/2013 1:01:28 PM -- Shutting down databases ...
6/18/2013 1:01:30 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.blg has 489 samples.
6/18/2013 1:01:30 PM -- Creating test report ...
6/18/2013 1:01:34 PM -- Instance1424.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
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6/18/2013 3:13:56 PM -- Instance1424.1 has 13.5 for I/O Database Reads Average Latency.

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6/18/2013 1:01:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.xml has 478 samples queried.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.html is saved.
6/18/2013 1:01:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:35 PM -- Verifying database checksums ...
6/18/2013 1:02:54 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:02:55 PM -- Verifying log checksums ...
6/18/2013 1:02:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_55.xml is saved.
6/18/2013 1:02:55 PM -- Jetstress testing ends.
6/18/2013 1:10:38 PM -- Jetstress testing begins ...
6/18/2013 1:10:38 PM -- Prepare testing begins ...
6/18/2013 1:10:44 PM -- Attaching databases ...
6/18/2013 1:10:44 PM -- Prepare testing ends.
6/18/2013 1:10:44 PM -- Dispatching transactions begins ...
6/18/2013 1:10:44 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:44 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:50 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:50 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:55 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:55 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:55 PM -- Attaining prerequisites:
6/18/2013 1:12:32 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1218224000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:51 PM -- JetInterop batch transaction stats: 40165, 40015, 39927, 39446 and 40003.
6/18/2013 3:13:51 PM -- Dispatching transactions ends.
6/18/2013 3:13:51 PM -- Shutting down databases ...
6/18/2013 3:13:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 3:13:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.blg has 485 samples.
6/18/2013 3:13:53 PM -- Creating test report ...
```

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6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.xml has 478 samples gueried.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.html is saved.
6/18/2013 3:13:57 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:57 PM -- Verifying database checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:23:18 PM -- Verifying log checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_18.xml is saved.
6/18/2013 3:23:18 PM -- Jetstress testing ends.
6/18/2013 3:31:19 PM -- Jetstress testing begins ...
6/18/2013 3:31:19 PM -- Prepare testing begins ...
6/18/2013 3:31:24 PM -- Attaching databases ...
6/18/2013 3:31:24 PM -- Prepare testing ends.
6/18/2013 3:31:24 PM -- Dispatching transactions begins ...
6/18/2013 3:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
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6/18/2013 3:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:35 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:35 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:35 PM -- Attaining prerequisites:
6/18/2013 3:33:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211597000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:21 PM -- Performance logging ends.
6/18/2013 6:06:51 PM -- JetInterop batch transaction stats: 49885, 49854, 49826, 49630 and 49416.
6/18/2013 6:06:51 PM -- Dispatching transactions ends.
6/18/2013 6:06:51 PM -- Shutting down databases ...
6/18/2013 6:06:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/18/2013 6:06:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.blg has 486 samples.
6/18/2013 6:06:53 PM -- Creating test report ...
6/18/2013 6:06:56 PM -- Instance1424.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.xml has 478 samples gueried.
6/18/2013 6:06:57 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 30.html is saved.
6/18/2013 6:06:58 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:58 PM -- Verifying database checksums ...
6/18/2013 11:23:57 PM -- C:\DB\DB1 (36% processed), C:\DB\DB2 (38% processed), C:\DB\DB3 (38% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(38% processed)
6/18/2013 11:23:58 PM -- Verifying log checksums ...
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6/18/2013 11:23:58 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_23_58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_23_58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 23 23 58.xml is saved.
6/18/2013 11:23:58 PM -- Jetstress testing ends.
6/18/2013 11:31:12 PM -- Jetstress testing begins ...
6/18/2013 11:31:12 PM -- Prepare testing begins ...
6/18/2013 11:31:18 PM -- Attaching databases ...
6/18/2013 11:31:18 PM -- Prepare testing ends.
6/18/2013 11:31:18 PM -- Dispatching transactions begins ...
6/18/2013 11:31:18 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:18 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:23 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:23 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:29 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:29 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:29 PM -- Attaining prerequisites:
6/18/2013 11:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211363000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:08 PM -- Performance logging ends.
6/20/2013 9:25:13 AM -- JetInterop batch transaction stats: 640995, 642366, 641371, 642573 and 642109.
6/20/2013 9:25:13 AM -- Dispatching transactions ends.
6/20/2013 9:25:13 AM -- Shutting down databases ...
6/20/2013 9:25:14 AM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and Instance1424.5
(complete)
6/20/2013 9:25:14 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.blg has 5757 samples.
6/20/2013 9:25:14 AM -- Creating test report ...
6/20/2013 9:25:40 AM -- Instance1424.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 11.8 for I/O Database Reads Average Latency.
```

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6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:40 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:40 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.xml has 5750 samples gueried.
6/20/2013 9:25:40 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.html is saved.
6/20/2013 9:25:41 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:41 AM -- Verifying database checksums ...
6/20/2013 2:29:53 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:29:53 PM -- Performance logging ends.
6/20/2013 2:29:53 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_40.blg has 608 samples.
6/20/2013 2:29:57 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 40.html is saved.
6/20/2013 2:29:57 PM -- Verifying log checksums ...
6/20/2013 2:29:58 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (13 log(s) processed)
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_29_58.evt is saved.
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_29_58.evt is saved.
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_29_58.xml is saved.
6/20/2013 2:29:58 PM -- Jetstress testing ends.
6/20/2013 3:52:19 PM -- Jetstress testing begins ...
6/20/2013 3:52:19 PM -- Prepare testing begins ...
6/20/2013 3:52:25 PM -- Attaching databases ...
6/20/2013 3:52:25 PM -- Prepare testing ends.
6/20/2013 3:52:33 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:33 PM -- Backing up databases ...
6/20/2013 9:20:14 PM -- Performance logging ends.
6/20/2013 9:20:14 PM -- Instance1424.1 (100% processed), Instance1424.2 (100% processed), Instance1424.3 (100% processed), Instance1424.4 (100% processed), Instance1424.3 (100% processed), Instance1424.4 (100% processed), Instance1424.3 (100% processed), Instance1
processed) and Instance1424.5 (100% processed)
6/20/2013 9:20:14 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_25.blg has 654 samples.
6/20/2013 9:20:14 PM -- Creating test report ...
```

Server 5 – JS10

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance3992.1	2058164.09	05:58:31	95.68
Instance3992.2	2058188.09	05:37:48	101.55
Instance3992.3	2058156.09	05:41:26	100.46
Instance3992.4	2058164.09	05:38:17	101.40
Instance3992.5	2058172.09	05:40:26	100.76

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance3992.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3992.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3992.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3992.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Instance3992.5	Log Path: C:\DB\DB5
	Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	4.352	0.000	382.460	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3992.2	3.871	0.000	406.121	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3992.3	3.900	0.000	401.838	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3992.4	3.981	0.000	405.491	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3992.5	3.963	0.000	403.022	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Counter	Average	Minimum	Maximum
% Processor Time	0.771	0.000	1.979
Available MBytes	61344.976	61326.000	61347.000
Free System Page Table Entries	33555670.042	33555670.000	33555672.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74928190.927	74915840.000	75010048.000
Pool Paged Bytes	224899998.749	223981568.000	226897920.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

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6/18/2013 10:56:54 AM -- Jetstress testing begins ...
6/18/2013 10:56:54 AM -- Prepare testing begins ...
6/18/2013 10:56:59 AM -- Attaching databases ...
6/18/2013 10:58:21 AM -- Jetstress testing begins ...
6/18/2013 10:58:21 AM -- Prepare testing begins ...
6/18/2013 10:58:26 AM -- Attaching databases ...
6/18/2013 10:58:26 AM -- Prepare testing ends.
6/18/2013 10:58:26 AM -- Dispatching transactions begins ...
6/18/2013 10:58:27 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:58:27 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:58:33 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:58:33 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:58:37 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:58:37 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:58:37 AM -- Attaining prerequisites:
6/18/2013 11:01:19 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213768000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:01:20 PM -- Performance logging ends.
6/18/2013 1:01:33 PM -- JetInterop batch transaction stats: 28554, 28934, 28713, 28744 and 28609.
6/18/2013 1:01:33 PM -- Dispatching transactions ends.
6/18/2013 1:01:33 PM -- Shutting down databases ...
6/18/2013 1:01:34 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.blg has 490 samples.
6/18/2013 1:01:34 PM -- Creating test report ...
6/18/2013 1:01:38 PM -- Instance3992.1 has 9.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 8.6 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 8.5 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
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6/18/2013 1:01:38 PM -- Instance3992.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:38 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.xml has 479 samples gueried.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance 2013_6_18_10_58_33.html is saved.
6/18/2013 1:01:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:39 PM -- Verifying database checksums ...
6/18/2013 1:03:07 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:08 PM -- Verifying log checksums ...
6/18/2013 1:03:08 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 13 3 8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_8.xml is saved.
6/18/2013 1:03:08 PM -- Jetstress testing ends.
6/18/2013 1:10:42 PM -- Jetstress testing begins ...
6/18/2013 1:10:42 PM -- Prepare testing begins ...
6/18/2013 1:10:48 PM -- Attaching databases ...
6/18/2013 1:10:48 PM -- Prepare testing ends.
6/18/2013 1:10:48 PM -- Dispatching transactions begins ...
6/18/2013 1:10:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:54 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:54 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:00 PM -- Attaining prerequisites:
6/18/2013 1:12:42 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214091000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:42 PM -- Performance logging ends.
6/18/2013 3:13:44 PM -- JetInterop batch transaction stats: 39666, 39743, 39580, 39429 and 39791.
6/18/2013 3:13:45 PM -- Dispatching transactions ends.
6/18/2013 3:13:45 PM -- Shutting down databases ...
6/18/2013 3:13:46 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
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6/18/2013 3:13:46 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.blg has 486 samples.
6/18/2013 3:13:46 PM -- Creating test report ...
6/18/2013 3:13:49 PM -- Instance3992.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:49 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.xml has 479 samples queried.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.html is saved.
6/18/2013 3:13:50 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:50 PM -- Verifying database checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (4% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:23:02 PM -- Verifying log checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_2.xml is saved.
6/18/2013 3:23:02 PM -- Jetstress testing ends.
6/18/2013 3:31:10 PM -- Jetstress testing begins ...
6/18/2013 3:31:10 PM -- Prepare testing begins ...
6/18/2013 3:31:15 PM -- Attaching databases ...
6/18/2013 3:31:15 PM -- Prepare testing ends.
6/18/2013 3:31:15 PM -- Dispatching transactions begins ...
```

```
6/18/2013 3:31:15 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:15 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:21 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:21 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:26 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:26 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:26 PM -- Attaining prerequisites:
6/18/2013 3:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212715000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:08 PM -- Performance logging ends.
6/18/2013 6:06:56 PM -- JetInterop batch transaction stats: 49468, 49617, 50081, 49679 and 49649.
6/18/2013 6:06:56 PM -- Dispatching transactions ends.
6/18/2013 6:06:56 PM -- Shutting down databases ...
6/18/2013 6:06:58 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/18/2013 6:06:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.blg has 486 samples.
6/18/2013 6:06:58 PM -- Creating test report ...
6/18/2013 6:07:01 PM -- Instance3992.1 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 21.xml has 479 samples gueried.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.html is saved.
6/18/2013 6:07:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:02 PM -- Verifying database checksums ...
```

```
6/18/2013 11:02:30 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:02:30 PM -- Performance logging ends.
6/18/2013 11:02:30 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_1.blg has 590 samples.
6/18/2013 11:02:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_1.html is saved.
6/18/2013 11:02:34 PM -- Verifying log checksums ...
6/18/2013 11:02:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (11 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (10 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 23 2 35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_2_35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_2_35.xml is saved.
6/18/2013 11:02:35 PM -- Jetstress testing ends.
6/18/2013 11:31:15 PM -- Jetstress testing begins ...
6/18/2013 11:31:15 PM -- Prepare testing begins ...
6/18/2013 11:31:21 PM -- Attaching databases ...
6/18/2013 11:31:21 PM -- Prepare testing ends.
6/18/2013 11:31:21 PM -- Dispatching transactions begins ...
6/18/2013 11:31:21 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:21 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:27 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:27 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:31 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:31 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:31 PM -- Attaining prerequisites:
6/18/2013 11:33:11 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211941000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:11 PM -- Performance logging ends.
6/20/2013 9:25:16 AM -- JetInterop batch transaction stats: 639917, 640064, 638230, 638667 and 640278.
6/20/2013 9:25:16 AM -- Dispatching transactions ends.
6/20/2013 9:25:16 AM -- Shutting down databases ...
6/20/2013 9:25:17 AM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and Instance3992.5
(complete)
6/20/2013 9:25:17 AM -- C:\Program Files\Exchange Jetstress\Stress 2013_6_18_23_31_27.blg has 5757 samples.
6/20/2013 9:25:17 AM -- Creating test report ...
6/20/2013 9:25:43 AM -- Instance3992.1 has 13.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 11.8 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:43 AM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:43 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:43 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 27.xml has 5750 samples queried.
6/20/2013 9:25:43 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_27.html is saved.
6/20/2013 9:25:44 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:44 AM -- Verifying database checksums ...
6/20/2013 2:30:42 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:30:42 PM -- Performance logging ends.
6/20/2013 2:30:42 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_43.blg has 609 samples.
6/20/2013 2:30:46 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 43.html is saved.
6/20/2013 2:30:46 PM -- Verifying log checksums ...
6/20/2013 2:30:47 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_30_47.evt is saved.
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_30_47.evt is saved.
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_30_47.xml is saved.
6/20/2013 2:30:47 PM -- Jetstress testing ends.
6/20/2013 3:52:21 PM -- Jetstress testing begins ...
6/20/2013 3:52:21 PM -- Prepare testing begins ...
6/20/2013 3:52:27 PM -- Attaching databases ...
6/20/2013 3:52:27 PM -- Prepare testing ends.
6/20/2013 3:52:35 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:35 PM -- Backing up databases ...
6/20/2013 9:51:07 PM -- Performance logging ends.
6/20/2013 9:51:07 PM -- Instance3992.1 (100% processed), Instance3992.2 (100% processed), Instance3992.3 (100% processed), Instance3992.4 (100% processed)
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

processed) and Instance3992.5 (100% processed)

6/20/2013 9:51:07 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_27.blg has 716 samples.

6/20/2013 9:51:07 PM -- Creating test report ...

Server 6 – JS11

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance304.1	2057708.09	05:40:26	100.74
Instance304.2	2057700.09	05:38:18	101.37
Instance304.3	2057716.09	05:43:09	99.94
Instance304.4	2057716.09	05:38:26	101.33
Instance304.5	2057668.09	05:49:16	98.19

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance304.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance304.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance304.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance304.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Instance304.5	Log Path: C:\DB\DB5
	Database: C:\DB\DB5\Jetstress005001.edb

MSExchange	I/O	I/O	I/O	I/O	I/O Database	I/O	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log
Database ==> Instances	Database Reads Average Latency (msec)	Database Writes Average Latency (msec)	Database Reads/sec	Database Writes/sec	Reads Average Bytes	Database Writes Average Bytes	Reads Average Latency (msec)	Writes Average Latency (msec)	Reads/sec	Writes/sec	Reads Average Bytes	Writes Average Bytes
Instance304.1	3.918	0.000	402.930	0.000	262143.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance304.2	3.956	0.000	405.354	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance304.3	3.985	0.000	399.683	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance304.4	3.869	0.000	405.337	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance304.5	4.055	0.000	392.342	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Counter	Average	Minimum	Maximum
% Processor Time	0.876	0.000	2.125
Available MBytes	61359.983	61227.000	61362.000
Free System Page Table Entries	33555156.851	33555093.000	33555159.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74228223.265	74219520.000	74289152.000
Pool Paged Bytes	227621965.865	227069952.000	230662144.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

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6/18/2013 10:56:56 AM -- Jetstress testing begins ...
6/18/2013 10:56:56 AM -- Prepare testing begins ...
6/18/2013 10:57:02 AM -- Attaching databases ...
6/18/2013 10:57:02 AM -- Prepare testing ends.
6/18/2013 10:57:02 AM -- Dispatching transactions begins ...
6/18/2013 10:57:02 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:02 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:08 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:08 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:12 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:12 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:12 AM -- Attaining prerequisites:
6/18/2013 10:59:40 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208623000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:35 PM -- JetInterop batch transaction stats: 28514, 28772, 28603, 28860 and 28659.
6/18/2013 1:01:36 PM -- Dispatching transactions ends.
6/18/2013 1:01:36 PM -- Shutting down databases ...
6/18/2013 1:01:37 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 1:01:37 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.blg has 489 samples.
6/18/2013 1:01:37 PM -- Creating test report ...
6/18/2013 1:01:40 PM -- Instance304.1 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:43 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.

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6/18/2013 1:01:40 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:40 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:40 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.xml has 479 samples queried.
6/18/2013 1:01:41 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_8.html is saved.
6/18/2013 1:01:42 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:42 PM -- Verifying database checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:12 PM -- Verifying log checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_12.xml is saved.
6/18/2013 1:03:12 PM -- Jetstress testing ends.
6/18/2013 1:10:46 PM -- Jetstress testing begins ...
6/18/2013 1:10:46 PM -- Prepare testing begins ...
6/18/2013 1:10:51 PM -- Attaching databases ...
6/18/2013 1:10:51 PM -- Prepare testing ends.
6/18/2013 1:10:51 PM -- Dispatching transactions begins ...
6/18/2013 1:10:51 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:51 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:57 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:57 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:02 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:02 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:02 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212584000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:38 PM -- JetInterop batch transaction stats: 38646, 38442, 38663, 38712 and 38705.
6/18/2013 3:13:38 PM -- Dispatching transactions ends.
6/18/2013 3:13:38 PM -- Shutting down databases ...
6/18/2013 3:13:39 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.blg has 486 samples.
6/18/2013 3:13:39 PM -- Creating test report ...
```

```
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.xml has 478 samples gueried.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.html is saved.
6/18/2013 3:13:44 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:44 PM -- Verifying database checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (3% processed) and C:\DB\DB5 (3%
processed)
6/18/2013 3:22:55 PM -- Verifying log checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed) and
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_22_55.xml is saved.
6/18/2013 3:22:55 PM -- Jetstress testing ends.
6/18/2013 3:31:03 PM -- Jetstress testing begins ...
6/18/2013 3:31:03 PM -- Prepare testing begins ...
6/18/2013 3:31:09 PM -- Attaching databases ...
6/18/2013 3:31:09 PM -- Prepare testing ends.
6/18/2013 3:31:09 PM -- Dispatching transactions begins ...
6/18/2013 3:31:09 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:09 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:15 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:15 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:20 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:20 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:20 PM -- Attaining prerequisites:
6/18/2013 3:33:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210692000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:33:01 PM -- Performance logging ends.
6/18/2013 6:06:46 PM -- JetInterop batch transaction stats: 47895, 47739, 48183, 48056 and 48255.
6/18/2013 6:06:46 PM -- Dispatching transactions ends.
6/18/2013 6:06:46 PM -- Shutting down databases ...
6/18/2013 6:06:47 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.blg has 485 samples.
6/18/2013 6:06:47 PM -- Creating test report ...
6/18/2013 6:06:50 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.xml has 478 samples gueried.
6/18/2013 6:06:51 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 15.html is saved.
6/18/2013 6:06:52 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:52 PM -- Verifying database checksums ...
6/18/2013 10:48:40 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:48:40 PM -- Performance logging ends.
```

```
6/18/2013 10:48:40 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.blg has 563 samples.
6/18/2013 10:48:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.html is saved.
6/18/2013 10:48:43 PM -- Verifying log checksums ...
6/18/2013 10:48:44 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_48_44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_48_44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_48_44.xml is saved.
6/18/2013 10:48:44 PM -- Jetstress testing ends.
6/18/2013 11:31:18 PM -- Jetstress testing begins ...
6/18/2013 11:31:18 PM -- Prepare testing begins ...
6/18/2013 11:31:24 PM -- Attaching databases ...
6/18/2013 11:31:24 PM -- Prepare testing ends.
6/18/2013 11:31:24 PM -- Dispatching transactions begins ...
6/18/2013 11:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:34 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:34 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:34 PM -- Attaining prerequisites:
6/18/2013 11:33:22 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208087000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:22 PM -- Performance logging ends.
6/20/2013 9:25:19 AM -- JetInterop batch transaction stats: 608115, 608020, 607589, 607483 and 607460.
6/20/2013 9:25:19 AM -- Dispatching transactions ends.
6/20/2013 9:25:19 AM -- Shutting down databases ...
6/20/2013 9:25:20 AM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and Instance304.5
(complete)
6/20/2013 9:25:20 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.blg has 5758 samples.
6/20/2013 9:25:20 AM -- Creating test report ...
6/20/2013 9:25:48 AM -- Instance304.1 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 12.4 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 12.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:48 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:48 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.xml has 5750 samples queried.
6/20/2013 9:25:48 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.html is saved.
6/20/2013 9:25:49 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:49 AM -- Verifying database checksums ...
6/20/2013 2:17:54 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:17:54 PM -- Performance logging ends.
6/20/2013 2:17:54 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_48.blg has 583 samples.
6/20/2013 2:17:58 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_48.html is saved.
6/20/2013 2:17:58 PM -- Verifying log checksums ...
6/20/2013 2:18:00 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 18 0.evt is saved.
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_18_0.evt is saved.
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_18_0.xml is saved.
6/20/2013 2:18:00 PM -- Jetstress testing ends.
6/20/2013 3:52:24 PM -- Jetstress testing begins ...
6/20/2013 3:52:24 PM -- Prepare testing begins ...
6/20/2013 3:52:30 PM -- Attaching databases ...
6/20/2013 3:52:30 PM -- Prepare testing ends.
6/20/2013 3:52:38 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:38 PM -- Backing up databases ...
6/20/2013 9:41:54 PM -- Performance logging ends.
6/20/2013 9:41:54 PM -- Instance304.1 (100% processed), Instance304.2 (100% processed), Instance304.3 (100% processed), Instance304.4 (100% processed)
and Instance304.5 (100% processed)
6/20/2013 9:41:54 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_30.blg has 697 samples.
6/20/2013 9:41:54 PM -- Creating test report ...
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

Server 7 – JS12

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance3984.1	2057108.09	05:50:01	97.95
Instance3984.2	2057116.09	05:47:49	98.57
Instance3984.3	2057100.09	05:49:27	98.11
Instance3984.4	2057100.09	05:48:39	98.34
Instance3984.5	2057100.09	05:49:28	98.10

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance3984.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3984.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3984.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3984.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database	I/O	I/O	I/O	I/O	I/O Database	I/O	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log	I/O Log
==> Instances	Database	Database	Database	Database	Reads Average	Database	Reads	Writes	Reads/sec	Writes/sec	Reads	Writes
	Reads	Writes	Reads/sec	Writes/sec	Bytes	Writes	Average	Average			Average	Average
	Average	Average				Average	Latency	Latency			Bytes	Bytes
	Latency (msec)	Latency (msec)				Bytes	(msec)	(msec)				
Instance3984.1	4.073	0.000	391.519	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3984.2	4.107	0.000	393.790	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3984.3	4.070	0.000	392.356	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3984.4	4.066	0.000	392.950	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3984.5	4.052	0.000	392.275	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.862	0.000	2.136
Available MBytes	61354.126	61220.000	61356.000
Free System Page Table Entries	33555157.677	33555094.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	75508218.873	75436032.000	75767808.000
Pool Paged Bytes	227876834.701	226709504.000	229642240.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:58 AM -- Jetstress testing begins ...
6/18/2013 10:56:58 AM -- Prepare testing begins ...
6/18/2013 10:57:04 AM -- Attaching databases ...
6/18/2013 10:57:04 AM -- Prepare testing ends.
6/18/2013 10:57:04 AM -- Dispatching transactions begins ...
6/18/2013 10:57:04 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:04 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:10 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:10 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:15 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:15 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:15 AM -- Attaining prerequisites:
6/18/2013 10:59:55 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211769000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:56 PM -- Performance logging ends.
6/18/2013 1:01:38 PM -- JetInterop batch transaction stats: 27473, 27301, 27492, 27469 and 27372.
6/18/2013 1:01:38 PM -- Dispatching transactions ends.
6/18/2013 1:01:38 PM -- Shutting down databases ...
6/18/2013 1:01:39 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 1:01:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.blg has 489 samples.
6/18/2013 1:01:39 PM -- Creating test report ...
6/18/2013 1:01:43 PM -- Instance3984.1 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 9.4 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:39 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.xml has 478 samples queried.
6/18/2013 1:01:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.html is saved.
6/18/2013 1:01:45 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:45 PM -- Verifying database checksums ...
6/18/2013 1:03:15 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:16 PM -- Verifying log checksums ...
6/18/2013 1:03:16 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:\DB4 (
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_16.xml is saved.
6/18/2013 1:03:16 PM -- Jetstress testing ends.
6/18/2013 1:10:48 PM -- Jetstress testing begins ...
6/18/2013 1:10:48 PM -- Prepare testing begins ...
6/18/2013 1:10:54 PM -- Attaching databases ...
6/18/2013 1:10:54 PM -- Prepare testing ends.
6/18/2013 1:10:54 PM -- Dispatching transactions begins ...
6/18/2013 1:10:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:05 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214104000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:34 PM -- JetInterop batch transaction stats: 36569, 36311, 36550, 36376 and 36492.
6/18/2013 3:13:35 PM -- Dispatching transactions ends.
6/18/2013 3:13:35 PM -- Shutting down databases ...
6/18/2013 3:13:36 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.blg has 486 samples.
6/18/2013 3:13:36 PM -- Creating test report ...
```

```
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:39 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.xml has 478 samples queried.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.html is saved.
6/18/2013 3:13:40 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:40 PM -- Verifying database checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (1%
processed)
6/18/2013 3:19:38 PM -- Verifying log checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_38.xml is saved.
6/18/2013 3:19:38 PM -- Jetstress testing ends.
6/18/2013 3:30:58 PM -- Jetstress testing begins ...
6/18/2013 3:30:58 PM -- Prepare testing begins ...
6/18/2013 3:31:04 PM -- Attaching databases ...
6/18/2013 3:31:04 PM -- Prepare testing ends.
6/18/2013 3:31:04 PM -- Dispatching transactions begins ...
6/18/2013 3:31:04 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:04 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:10 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:10 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:15 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:15 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:15 PM -- Attaining prerequisites:
6/18/2013 3:32:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208979000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:59 PM -- Performance logging ends.
6/18/2013 6:06:42 PM -- JetInterop batch transaction stats: 44967, 45509, 45269, 45388 and 45393.
6/18/2013 6:06:42 PM -- Dispatching transactions ends.
6/18/2013 6:06:42 PM -- Shutting down databases ...
6/18/2013 6:06:44 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/18/2013 6:06:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.blg has 486 samples.
6/18/2013 6:06:44 PM -- Creating test report ...
6/18/2013 6:06:47 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.xml has 479 samples gueried.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 10.html is saved.
6/18/2013 6:06:48 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:48 PM -- Verifying database checksums ...
6/18/2013 10:55:52 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:55:52 PM -- Performance logging ends.
```

```
6/18/2013 10:55:52 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.blg has 577 samples.
6/18/2013 10:55:56 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.html is saved.
6/18/2013 10:55:56 PM -- Verifying log checksums ...
6/18/2013 10:55:57 PM -- C:\DB\DB1 (13 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (11 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_55_57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\System 2013_6_18_22_55_57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_55_57.xml is saved.
6/18/2013 10:55:57 PM -- Jetstress testing ends.
6/18/2013 11:31:21 PM -- Jetstress testing begins ...
6/18/2013 11:31:21 PM -- Prepare testing begins ...
6/18/2013 11:31:27 PM -- Attaching databases ...
6/18/2013 11:31:27 PM -- Prepare testing ends.
6/18/2013 11:31:27 PM -- Dispatching transactions begins ...
6/18/2013 11:31:27 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:27 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:33 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:33 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:37 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:37 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:37 PM -- Attaining prerequisites:
6/18/2013 11:33:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213645000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:34 PM -- Performance logging ends.
6/20/2013 9:25:22 AM -- JetInterop batch transaction stats: 570992, 569982, 569558, 571133 and 570524.
6/20/2013 9:25:22 AM -- Dispatching transactions ends.
6/20/2013 9:25:22 AM -- Shutting down databases ...
6/20/2013 9:25:24 AM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and Instance3984.5
(complete)
6/20/2013 9:25:24 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 33.blg has 5758 samples.
6/20/2013 9:25:24 AM -- Creating test report ...
6/20/2013 9:25:55 AM -- Instance3984.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 13.1 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:25:55 AM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 13.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 13.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:55 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:55 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.xml has 5750 samples queried.
6/20/2013 9:25:55 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.html is saved.
6/20/2013 9:25:56 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:56 AM -- Verifying database checksums ...
6/20/2013 2:25:38 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:25:38 PM -- Performance logging ends.
6/20/2013 2:25:38 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_55.blg has 599 samples.
6/20/2013 2:25:42 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_55.html is saved.
6/20/2013 2:25:42 PM -- Verifying log checksums ...
6/20/2013 2:25:42 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (11 log(s) processed)
and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 25 43.evt is saved.
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_25_43.evt is saved.
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_25_43.xml is saved.
6/20/2013 2:25:43 PM -- Jetstress testing ends.
6/20/2013 3:52:26 PM -- Jetstress testing begins ...
6/20/2013 3:52:27 PM -- Prepare testing begins ...
6/20/2013 3:52:32 PM -- Attaching databases ...
6/20/2013 3:52:32 PM -- Prepare testing ends.
6/20/2013 3:52:41 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:41 PM -- Backing up databases ...
6/20/2013 9:42:42 PM -- Performance logging ends.
6/20/2013 9:42:42 PM -- Instance3984.1 (100% processed), Instance3984.2 (100% processed), Instance3984.3 (100% processed), Instance3
processed) and Instance3984.5 (100% processed)
6/20/2013 9:42:42 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_32.blg has 699 samples.
6/20/2013 9:42:42 PM -- Creating test report ...
```

Server 8 – JS13

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance376.1	2057804.09	05:49:47	98.05
Instance376.2	2057796.09	05:46:03	99.11
Instance376.3	2057788.09	05:39:33	101.00
Instance376.4	2057812.09	05:49:16	98.20
Instance376.5	2057772.09	05:38:38	101.27

Jetstress System Parameters

Thread Count	5 (per database)				
Minimum Database Cache	160.0 MB				
Maximum Database Cache	1280.0 MB				
Insert Operations	40%				
Delete Operations	20%				
Replace Operations	5%				
Read Operations	35%				
Lazy Commits	70%				

Instance376.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance376.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance376.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance376.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database ==> Instances	I/O Database Reads Average Latency	I/O Database Writes Average Latency	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	(msec) 4.174	(msec) 0.000	391.216	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance376.2	3.984	0.000	396.390	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance376.3	3.880	0.000	403.969	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance376.4	4.057	0.000	392.410	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance376.5	3.851	0.000	405.078	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.786	0.000	2.122
Available MBytes	61332.103	61184.000	61335.000
Free System Page Table Entries	33555158.509	33555094.000	33555670.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	77599036.883	77574144.000	77656064.000
Pool Paged Bytes	228798176.458	228028416.000	230969344.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 1:10:51 PM -- Jetstress testing begins ...
6/18/2013 1:10:51 PM -- Prepare testing begins ...
6/18/2013 1:10:56 PM -- Attaching databases ...
6/18/2013 1:10:56 PM -- Prepare testing ends.
6/18/2013 1:10:56 PM -- Dispatching transactions begins ...
6/18/2013 1:10:56 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:56 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:02 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:02 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:08 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:08 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:08 PM -- Attaining prerequisites:
6/18/2013 1:12:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212314000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:12:59 PM -- Performance logging ends.
6/18/2013 3:13:31 PM -- JetInterop batch transaction stats: 38705, 38814, 39021, 38453 and 38697.
6/18/2013 3:13:31 PM -- Dispatching transactions ends.
6/18/2013 3:13:31 PM -- Shutting down databases ...
6/18/2013 3:13:32 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 3:13:32 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.blg has 486 samples.
6/18/2013 3:13:32 PM -- Creating test report ...
6/18/2013 3:13:35 PM -- Instance376.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 6:06:42 PM -- Instance376.1 has 12.8 for I/O Database Reads Average Latency.

```
6/18/2013 3:13:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.xml has 478 samples queried.
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.html is saved.
6/18/2013 3:13:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:37 PM -- Verifying database checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:48 PM -- Verifying log checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18 15 19 48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 15 19 48.xml is saved.
6/18/2013 3:19:48 PM -- Jetstress testing ends.
6/18/2013 3:30:54 PM -- Jetstress testing begins ...
6/18/2013 3:30:54 PM -- Prepare testing begins ...
6/18/2013 3:30:59 PM -- Attaching databases ...
6/18/2013 3:30:59 PM -- Prepare testing ends.
6/18/2013 3:30:59 PM -- Dispatching transactions begins ...
6/18/2013 3:30:59 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:59 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:05 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:05 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:10 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:10 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:10 PM -- Attaining prerequisites:
6/18/2013 3:32:38 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1217004000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:38 PM -- Performance logging ends.
6/18/2013 6:06:37 PM -- JetInterop batch transaction stats: 48261, 47876, 48075, 48535 and 47826.
6/18/2013 6:06:37 PM -- Dispatching transactions ends.
6/18/2013 6:06:37 PM -- Shutting down databases ...
6/18/2013 6:06:38 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.blg has 485 samples.
6/18/2013 6:06:38 PM -- Creating test report ...
```

```
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:42 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.xml has 479 samples queried.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.html is saved.
6/18/2013 6:06:43 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:43 PM -- Verifying database checksums ...
6/18/2013 10:49:17 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB (100% proce
C:\DB\DB5 (100% processed)
6/18/2013 10:49:17 PM -- Performance logging ends.
6/18/2013 10:49:17 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_42.blg has 564 samples.
6/18/2013 10:49:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_42.html is saved.
6/18/2013 10:49:21 PM -- Verifying log checksums ...
6/18/2013 10:49:32 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_49_32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 22 49 32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_49_32.xml is saved.
6/18/2013 10:49:32 PM -- Jetstress testing ends.
6/18/2013 11:31:24 PM -- Jetstress testing begins ...
6/18/2013 11:31:24 PM -- Prepare testing begins ...
6/18/2013 11:31:30 PM -- Attaching databases ...
6/18/2013 11:31:30 PM -- Prepare testing ends.
6/18/2013 11:31:30 PM -- Dispatching transactions begins ...
```

```
6/18/2013 11:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:40 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:40 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:40 PM -- Attaining prerequisites:
6/18/2013 11:33:28 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210618000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:28 PM -- Performance logging ends.
6/20/2013 9:25:25 AM -- JetInterop batch transaction stats: 614214, 615393, 614395, 614415 and 615185.
6/20/2013 9:25:26 AM -- Dispatching transactions ends.
6/20/2013 9:25:26 AM -- Shutting down databases ...
6/20/2013 9:25:27 AM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete) and Instance376.5
(complete)
6/20/2013 9:25:27 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.blg has 5758 samples.
6/20/2013 9:25:27 AM -- Creating test report ...
6/20/2013 9:26:03 AM -- Instance376.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:03 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 36.xml has 5750 samples gueried.
6/20/2013 9:26:03 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.html is saved.
6/20/2013 9:26:04 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:26:04 AM -- Verifying database checksums ...
```

```
6/20/2013 2:18:53 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:18:53 PM -- Performance logging ends.
6/20/2013 2:18:53 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_3.blg has 585 samples.
6/20/2013 2:18:57 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_3.html is saved.
6/20/2013 2:18:57 PM -- Verifying log checksums ...
6/20/2013 2:18:58 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (13 log(s) processed)
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 18 58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_18_58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_18_58.xml is saved.
6/20/2013 2:18:58 PM -- Jetstress testing ends.
6/20/2013 3:52:30 PM -- Jetstress testing begins ...
6/20/2013 3:52:30 PM -- Prepare testing begins ...
6/20/2013 3:52:35 PM -- Attaching databases ...
6/20/2013 3:52:35 PM -- Prepare testing ends.
6/20/2013 3:52:44 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:44 PM -- Backing up databases ...
6/20/2013 9:42:31 PM -- Performance logging ends.
6/20/2013 9:42:31 PM -- Instance376.1 (100% processed), Instance376.2 (100% processed), Instance376.3 (100% processed), Instance376.4 (100% processed)
and Instance376.5 (100% processed)
6/20/2013 9:42:31 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_35.blg has 698 samples.
6/20/2013 9:42:31 PM -- Creating test report ...
```

Server 9 – JS14

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance3036.1	2057836.09	05:37:35	101.59
Instance3036.2	2057772.09	05:44:09	99.65
Instance3036.3	2057828.09	05:44:12	99.64
Instance3036.4	2057780.09	05:45:01	99.40
Instance3036.5	2057780.09	05:40:18	100.78

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance3036.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3036.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3036.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3036.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Ir	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3036.1	3.935	0.000	406.412	0.000	262144.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3036.2	4.032	0.000	398.505	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3036.3	3.962	0.000	398.477	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3036.4	4.018	0.000	397.605	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3036.5	4.009	0.000	402.882	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.874	0.000	2.180
Available MBytes	61327.599	61311.000	61329.000
Free System Page Table Entries	33555158.036	33555157.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	76998397.399	76996608.000	77045760.000
Pool Paged Bytes	229656674.090	229224448.000	232161280.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:57:02 AM -- Jetstress testing begins ...
6/18/2013 10:57:02 AM -- Prepare testing begins ...
6/18/2013 10:57:08 AM -- Attaching databases ...
6/18/2013 10:57:08 AM -- Prepare testing ends.
6/18/2013 10:57:08 AM -- Dispatching transactions begins ...
6/18/2013 10:57:08 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:08 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:14 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:14 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:19 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:19 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:19 AM -- Attaining prerequisites:
6/18/2013 10:59:56 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214312000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 12:59:57 PM -- Performance logging ends.
6/18/2013 1:01:42 PM -- JetInterop batch transaction stats: 28495, 28592, 28499, 28409 and 28651.
6/18/2013 1:01:42 PM -- Dispatching transactions ends.
6/18/2013 1:01:42 PM -- Shutting down databases ...
6/18/2013 1:01:43 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.blg has 489 samples.
6/18/2013 1:01:43 PM -- Creating test report ...
6/18/2013 1:01:47 PM -- Instance3036.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:47 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:31 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.xml has 478 samples queried.
6/18/2013 1:01:48 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_14.html is saved.
6/18/2013 1:01:49 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:49 PM -- Verifying database checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:23 PM -- Verifying log checksums ...
6/18/2013 1:03:23 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:\DB4
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 23.evt is saved.
6/18/2013 1:03:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_23.xml is saved.
6/18/2013 1:03:23 PM -- Jetstress testing ends.
6/18/2013 1:10:53 PM -- Jetstress testing begins ...
6/18/2013 1:10:53 PM -- Prepare testing begins ...
6/18/2013 1:10:58 PM -- Attaching databases ...
6/18/2013 1:10:58 PM -- Prepare testing ends.
6/18/2013 1:10:58 PM -- Dispatching transactions begins ...
6/18/2013 1:10:58 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:58 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:04 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:04 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:09 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:09 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:09 PM -- Attaining prerequisites:
6/18/2013 1:13:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212580000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:01 PM -- Performance logging ends.
6/18/2013 3:13:27 PM -- JetInterop batch transaction stats: 38329, 38212, 38631, 38609 and 38554.
6/18/2013 3:13:27 PM -- Dispatching transactions ends.
6/18/2013 3:13:27 PM -- Shutting down databases ...
6/18/2013 3:13:28 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.blg has 486 samples.
6/18/2013 3:13:28 PM -- Creating test report ...
```

```
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:31 PM -- Instance3036.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:31 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:31 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.xml has 478 samples queried.
6/18/2013 3:13:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_4.html is saved.
6/18/2013 3:13:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:32 PM -- Verifying database checksums ...
6/18/2013 3:19:58 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:19:59 PM -- Verifying log checksums ...
6/18/2013 3:19:59 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_59.evt is saved.
6/18/2013 3:19:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_59.xml is saved.
6/18/2013 3:19:59 PM -- Jetstress testing ends.
6/18/2013 3:30:49 PM -- Jetstress testing begins ...
6/18/2013 3:30:49 PM -- Prepare testing begins ...
6/18/2013 3:30:54 PM -- Attaching databases ...
6/18/2013 3:30:54 PM -- Prepare testing ends.
6/18/2013 3:30:54 PM -- Dispatching transactions begins ...
6/18/2013 3:30:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:31:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:05 PM -- Attaining prerequisites:
6/18/2013 3:32:26 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208418000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:26 PM -- Performance logging ends.
6/18/2013 6:06:33 PM -- JetInterop batch transaction stats: 48153, 48521, 48670, 48815 and 48195.
6/18/2013 6:06:33 PM -- Dispatching transactions ends.
6/18/2013 6:06:33 PM -- Shutting down databases ...
6/18/2013 6:06:34 PM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.blg has 484 samples.
6/18/2013 6:06:34 PM -- Creating test report ...
6/18/2013 6:06:37 PM -- Instance3036.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:37 PM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:37 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:37 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:37 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_0.xml has 478 samples gueried.
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 0.html is saved.
6/18/2013 6:06:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:39 PM -- Verifying database checksums ...
6/18/2013 10:50:22 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 10:50:22 PM -- Performance logging ends.
```

6/18/2013 10:50:22 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_38.blg has 567 samples.

```
6/18/2013 10:50:26 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_38.html is saved.
6/18/2013 10:50:26 PM -- Verifying log checksums ...
6/18/2013 10:50:27 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_50_27.evt is saved.
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_50_27.evt is saved.
6/18/2013 10:50:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_50_27.xml is saved.
6/18/2013 10:50:27 PM -- Jetstress testing ends.
6/18/2013 11:31:27 PM -- Jetstress testing begins ...
6/18/2013 11:31:27 PM -- Prepare testing begins ...
6/18/2013 11:31:33 PM -- Attaching databases ...
6/18/2013 11:31:33 PM -- Prepare testing ends.
6/18/2013 11:31:33 PM -- Dispatching transactions begins ...
6/18/2013 11:31:33 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:33 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:39 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:39 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:43 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:43 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:43 PM -- Attaining prerequisites:
6/18/2013 11:33:34 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209827000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:34 PM -- Performance logging ends.
6/20/2013 9:25:28 AM -- JetInterop batch transaction stats: 616595, 615782, 616827, 616186 and 615223.
6/20/2013 9:25:29 AM -- Dispatching transactions ends.
6/20/2013 9:25:29 AM -- Shutting down databases ...
6/20/2013 9:25:30 AM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete) and Instance3036.5
(complete)
6/20/2013 9:25:30 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 39.blg has 5758 samples.
6/20/2013 9:25:30 AM -- Creating test report ...
6/20/2013 9:26:07 AM -- Instance3036.1 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.3 has 12.4 for I/O Database Reads Average Latency.
```

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6/20/2013 9:26:07 AM -- Instance3036.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance 3036.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:07 AM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:07 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:07 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:07 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_39.xml has 5750 samples queried.
6/20/2013 9:26:07 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_39.html is saved.
6/20/2013 9:26:08 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:26:08 AM -- Verifying database checksums ...
6/20/2013 2:18:53 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:18:53 PM -- Performance logging ends.
6/20/2013 2:18:53 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_7.blg has 585 samples.
6/20/2013 2:18:57 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_7.html is saved.
6/20/2013 2:18:57 PM -- Verifying log checksums ...
6/20/2013 2:18:58 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 18 58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_18_58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_18_58.xml is saved.
6/20/2013 2:18:58 PM -- Jetstress testing ends.
6/20/2013 3:52:32 PM -- Jetstress testing begins ...
6/20/2013 3:52:32 PM -- Prepare testing begins ...
6/20/2013 3:52:37 PM -- Attaching databases ...
6/20/2013 3:52:37 PM -- Prepare testing ends.
6/20/2013 3:52:45 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:45 PM -- Backing up databases ...
6/20/2013 9:37:46 PM -- Performance logging ends.
6/20/2013 9:37:46 PM -- Instance3036.1 (100% processed), Instance3036.2 (100% processed), Instance3036.3 (100% processed), Instance3036.4 (100% processed)
processed) and Instance3036.5 (100% processed)
6/20/2013 9:37:46 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_37.blg has 689 samples.
6/20/2013 9:37:46 PM -- Creating test report ...
```

Server 10 – JS15

Database Backup Statistics - All

Database Instance	Database Size (MBytes)	Elapsed Backup Time	MBytes Transferred/sec
Instance3368.1	2057076.09	05:44:15	99.59
Instance3368.2	2057076.09	05:49:30	98.09
Instance3368.3	2057092.09	05:46:14	99.02
Instance3368.4	2057092.09	05:56:58	96.04
Instance3368.5	2057068.09	05:46:09	99.05

Jetstress System Parameters

Thread Count	5 (per database)
Minimum Database Cache	160.0 MB
Maximum Database Cache	1280.0 MB
Insert Operations	40%
Delete Operations	20%
Replace Operations	5%
Read Operations	35%
Lazy Commits	70%

Instance3368.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3368.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3368.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3368.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb

Instance3368.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.ed

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3368.1	3.996	0.000	398.264	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3368.2	4.053	0.000	392.145	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3368.3	4.008	0.000	395.734	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3368.4	4.248	0.000	383.998	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Instance3368.5	4.089	0.000	395.903	0.000	262144.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	0.854	0.000	2.196
Available MBytes	61321.989	61189.000	61324.000
Free System Page Table Entries	33555157.938	33555094.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	75021686.844	75018240.000	75083776.000
Pool Paged Bytes	229097115.826	228429824.000	232288256.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:57:05 AM -- Jetstress testing begins ...
6/18/2013 10:57:05 AM -- Prepare testing begins ...
6/18/2013 10:57:11 AM -- Attaching databases ...
6/18/2013 10:57:11 AM -- Prepare testing ends.
6/18/2013 10:57:11 AM -- Dispatching transactions begins ...
6/18/2013 10:57:11 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:11 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:17 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:17 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:22 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:22 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:22 AM -- Attaining prerequisites:
6/18/2013 11:00:09 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1216705000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 1:00:10 PM -- Performance logging ends.
6/18/2013 1:01:44 PM -- JetInterop batch transaction stats: 27048, 27032, 26988, 26878 and 26468.
6/18/2013 1:01:44 PM -- Dispatching transactions ends.
6/18/2013 1:01:44 PM -- Shutting down databases ...
6/18/2013 1:01:45 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 1:01:45 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.blg has 490 samples.
6/18/2013 1:01:45 PM -- Creating test report ...
6/18/2013 1:01:50 PM -- Instance3368.1 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
```

6/18/2013 3:13:27 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.

```
6/18/2013 1:01:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.xml has 478 samples queried.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_17.html is saved.
6/18/2013 1:01:51 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:51 PM -- Verifying database checksums ...
6/18/2013 1:03:26 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and C:\DB\DB5 (0%
processed)
6/18/2013 1:03:27 PM -- Verifying log checksums ...
6/18/2013 1:03:27 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB (DB4 (0 log(s) processed), C:\DB4 (DB4 (0 log(s) processed), C:
C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6 18 13 3 27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013_6_18_13_3_27.xml is saved.
6/18/2013 1:03:27 PM -- Jetstress testing ends.
6/18/2013 1:10:56 PM -- Jetstress testing begins ...
6/18/2013 1:10:56 PM -- Prepare testing begins ...
6/18/2013 1:11:01 PM -- Attaching databases ...
6/18/2013 1:11:01 PM -- Prepare testing ends.
6/18/2013 1:11:01 PM -- Dispatching transactions begins ...
6/18/2013 1:11:01 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:11:01 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:07 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:07 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:12 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:12 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:12 PM -- Attaining prerequisites:
6/18/2013 1:13:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209389000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 3:13:04 PM -- Performance logging ends.
6/18/2013 3:13:23 PM -- JetInterop batch transaction stats: 35518, 35669, 35556, 35802 and 35966.
6/18/2013 3:13:23 PM -- Dispatching transactions ends.
6/18/2013 3:13:23 PM -- Shutting down databases ...
6/18/2013 3:13:24 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 3:13:24 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.blg has 486 samples.
6/18/2013 3:13:24 PM -- Creating test report ...
```

```
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 14.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.xml has 478 samples queried.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.html is saved.
6/18/2013 3:13:29 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:29 PM -- Verifying database checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and C:\DB\DB5 (2%
processed)
6/18/2013 3:20:18 PM -- Verifying log checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s) processed)
C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_20_18.xml is saved.
6/18/2013 3:20:18 PM -- Jetstress testing ends.
6/18/2013 3:30:44 PM -- Jetstress testing begins ...
6/18/2013 3:30:44 PM -- Prepare testing begins ...
6/18/2013 3:30:50 PM -- Attaching databases ...
6/18/2013 3:30:50 PM -- Prepare testing ends.
6/18/2013 3:30:50 PM -- Dispatching transactions begins ...
6/18/2013 3:30:50 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:50 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:30:56 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
```

```
6/18/2013 3:30:56 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:00 PM -- Attaining prerequisites:
6/18/2013 3:32:27 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211609000.0 (lower bound: 1207960000.0, upper bound: none)
6/18/2013 5:32:28 PM -- Performance logging ends.
6/18/2013 6:06:29 PM -- JetInterop batch transaction stats: 44740, 45056, 44895, 45109 and 44950.
6/18/2013 6:06:29 PM -- Dispatching transactions ends.
6/18/2013 6:06:29 PM -- Shutting down databases ...
6/18/2013 6:06:31 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/18/2013 6:06:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.blg has 485 samples.
6/18/2013 6:06:31 PM -- Creating test report ...
6/18/2013 6:06:34 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 12.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 14.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.xml has 479 samples gueried.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 30 56.html is saved.
6/18/2013 6:06:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:35 PM -- Verifying database checksums ...
6/18/2013 11:00:55 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
C:\DB\DB5 (100% processed)
6/18/2013 11:00:55 PM -- Performance logging ends.
```

```
6/18/2013 11:00:55 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.blg has 588 samples.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.html is saved.
6/18/2013 11:00:59 PM -- Verifying log checksums ...
6/18/2013 11:00:59 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_0_59.xml is saved.
6/18/2013 11:00:59 PM -- Jetstress testing ends.
6/18/2013 11:31:30 PM -- Jetstress testing begins ...
6/18/2013 11:31:30 PM -- Prepare testing begins ...
6/18/2013 11:31:36 PM -- Attaching databases ...
6/18/2013 11:31:36 PM -- Prepare testing ends.
6/18/2013 11:31:36 PM -- Dispatching transactions begins ...
6/18/2013 11:31:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:47 PM -- Attaining prerequisites:
6/18/2013 11:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210147000.0 (lower bound: 1207960000.0, upper bound: none)
6/19/2013 11:33:45 PM -- Performance logging ends.
6/20/2013 9:25:31 AM -- JetInterop batch transaction stats: 570046, 568431, 569389, 570233 and 570725.
6/20/2013 9:25:31 AM -- Dispatching transactions ends.
6/20/2013 9:25:31 AM -- Shutting down databases ...
6/20/2013 9:25:33 AM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and Instance3368.5
(complete)
6/20/2013 9:25:33 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 42.blg has 5758 samples.
6/20/2013 9:25:33 AM -- Creating test report ...
6/20/2013 9:26:08 AM -- Instance3368.1 has 12.6 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 12.9 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 12.7 for I/O Database Reads Average Latency.
```

```
6/20/2013 9:26:08 AM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 14.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:08 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:08 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.xml has 5750 samples queried.
6/20/2013 9:26:08 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.html is saved.
6/20/2013 9:26:09 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:26:09 AM -- Verifying database checksums ...
6/20/2013 2:30:14 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed) and C:\DB\DB5
(100% processed)
6/20/2013 2:30:14 PM -- Performance logging ends.
6/20/2013 2:30:14 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_8.blg has 607 samples.
6/20/2013 2:30:18 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_8.html is saved.
6/20/2013 2:30:18 PM -- Verifying log checksums ...
6/20/2013 2:30:19 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (10 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12 log(s) processed)
and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 30 19.evt is saved.
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_30_19.evt is saved.
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_30_19.xml is saved.
6/20/2013 2:30:19 PM -- Jetstress testing ends.
6/20/2013 3:52:34 PM -- Jetstress testing begins ...
6/20/2013 3:52:34 PM -- Prepare testing begins ...
6/20/2013 3:52:40 PM -- Attaching databases ...
6/20/2013 3:52:40 PM -- Prepare testing ends.
6/20/2013 3:52:48 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:48 PM -- Backing up databases ...
6/20/2013 9:49:46 PM -- Performance logging ends.
6/20/2013 9:49:46 PM -- Instance3368.1 (100% processed), Instance3368.2 (100% processed), Instance3368.3 (100% processed), Instance3368.4 (100% processed)
processed) and Instance3368.5 (100% processed)
6/20/2013 9:49:47 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_40.blg has 713 samples.
6/20/2013 9:49:47 PM -- Creating test report ...
```

Appendix D: Recovery testing

Server 1 – JS6

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance2792.1	509	695.9048609
Instance2792.2	505	668.3238841
Instance2792.3	505	682.1143725
Instance2792.4	501	687.9488099
Instance2792.5	518	703.5957102

Instance2792.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2792.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2792.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2792.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance2792.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	8.358	0.895	688.388	4.403	40629.053	32768.000	9.338	0.000	6.604	0.000	232516.428	0.000
Instance2792.2	8.211	0.858	707.098	4.545	40821.725	32768.000	8.857	0.004	6.817	0.005	232471.281	3.103
Instance2792.3	8.200	0.882	704.929	4.455	40747.636	32768.000	8.656	0.000	6.682	0.000	232501.912	0.000
Instance2792.4	8.337	0.901	680.795	4.375	40720.647	32768.000	8.577	0.000	6.563	0.000	232482.385	0.000
Instance2792.5	8.359	0.923	687.556	4.429	40759.327	32768.000	8.875	0.000	6.644	0.000	232484.170	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2792.1	26.219	261899.683
Instance2792.2	26.366	262024.001
Instance2792.3	26.821	261920.605
Instance2792.4	26.883	261969.074
Instance2792.5	26.270	261962.927

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2792.1	8.358	0.895	714.607	4.403	48747.624	32768.000	9.338	0.000	6.604	0.000	232516.428	0.000
Instance2792.2	8.211	0.858	733.464	4.545	48773.252	32768.000	8.857	0.004	6.817	0.005	232471.281	3.103
Instance2792.3	8.200	0.882	731.750	4.455	48854.258	32768.000	8.656	0.000	6.682	0.000	232501.912	0.000
Instance2792.4	8.337	0.901	707.677	4.375	49125.218	32768.000	8.577	0.000	6.563	0.000	232482.385	0.000
Instance2792.5	8.359	0.923	713.826	4.429	48899.880	32768.000	8.875	0.000	6.644	0.000	232484.170	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.727	0.000	8.697
Available MBytes	28552.414	28508.000	29739.000
Free System Page Table Entries	33555219.052	33555158.000	33557202.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	93781921.839	93691904.000	94081024.000
Pool Paged Bytes	236394684.322	236359680.000	236441600.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

6/18/2013 10:56:39 AM -- Jetstress testing begins ...

6/18/2013 10:56:39 AM -- Prepare testing begins ...

6/18/2013 10:56:45 AM -- Attaching databases ...

6/18/2013 10:56:45 AM -- Prepare testing ends.

6/18/2013 10:56:45 AM -- Dispatching transactions begins ...

6/18/2013 10:56:45 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)

6/18/2013 10:56:45 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)

6/18/2013 10:56:51 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).

6/18/2013 10:56:51 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).

6/18/2013 10:56:57 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

6/18/2013 10:56:57 AM -- Performance logging begins (interval: 15000 ms).

6/18/2013 10:56:57 AM -- Attaining prerequisites:

bound: none)

6/18/2013 12:59:17 PM -- Performance logging ends.

6/18/2013 1:01:23 PM -- JetInterop batch transaction stats: 29405, 29337, 29553, 29188 and 29402.

6/18/2013 1:01:23 PM -- Dispatching transactions ends.

6/18/2013 1:01:23 PM -- Shutting down databases ...

6/18/2013 1:01:25 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and

Instance2792.5 (complete)

```
6/18/2013 1:01:25 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.blg has 488 samples.
6/18/2013 1:01:25 PM -- Creating test report ...
6/18/2013 1:01:28 PM -- Instance2792.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:28 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.xml has 478 samples gueried.
6/18/2013 1:01:29 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_51.html is saved.
6/18/2013 1:01:30 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:30 PM -- Verifying database checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:02:43 PM -- Verifying log checksums ...
6/18/2013 1:02:43 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_43.evt is saved.
6/18/2013 1:02:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_44.xml is saved.
6/18/2013 1:02:44 PM -- Jetstress testing ends.
6/18/2013 1:10:31 PM -- Jetstress testing begins ...
6/18/2013 1:10:31 PM -- Prepare testing begins ...
```

6/18/2013 1:10:36 PM -- Attaching databases ...

```
6/18/2013 1:10:36 PM -- Prepare testing ends.
6/18/2013 1:10:36 PM -- Dispatching transactions begins ...
6/18/2013 1:10:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:47 PM -- Attaining prerequisites:
6/18/2013 1:12:17 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213207000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 3:12:18 PM -- Performance logging ends.
6/18/2013 3:14:07 PM -- JetInterop batch transaction stats: 40799, 40518, 40863, 40517 and 40635.
6/18/2013 3:14:07 PM -- Dispatching transactions ends.
6/18/2013 3:14:07 PM -- Shutting down databases ...
6/18/2013 3:14:08 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and
Instance2792.5 (complete)
6/18/2013 3:14:08 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.blg has 485 samples.
6/18/2013 3:14:08 PM -- Creating test report ...
6/18/2013 3:14:11 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Writes Average Latency.
```

6/18/2013 6:07:19 PM -- Shutting down databases ...

```
6/18/2013 3:14:11 PM -- Instance2792.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:11 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:11 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 10 42.xml has 478 samples gueried.
6/18/2013 3:14:11 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_42.html is saved.
6/18/2013 3:14:13 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:13 PM -- Verifying database checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed)
C:\DB\DB5 (4% processed)
6/18/2013 3:23:45 PM -- Verifying log checksums ...
6/18/2013 3:23:45 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 15 23 45.evt is saved.
6/18/2013 3:23:45 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_45.xml is saved.
6/18/2013 3:23:45 PM -- Jetstress testing ends.
6/18/2013 3:31:43 PM -- Jetstress testing begins ...
6/18/2013 3:31:43 PM -- Prepare testing begins ...
6/18/2013 3:31:48 PM -- Attaching databases ...
6/18/2013 3:31:48 PM -- Prepare testing ends.
6/18/2013 3:31:48 PM -- Dispatching transactions begins ...
6/18/2013 3:31:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:55 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:55 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:32:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:32:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:32:00 PM -- Attaining prerequisites:
6/18/2013 3:33:50 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215541000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:51 PM -- Performance logging ends.
6/18/2013 6:07:18 PM -- JetInterop batch transaction stats: 49701, 50075, 49817, 49657 and 50057.
6/18/2013 6:07:19 PM -- Dispatching transactions ends.
```

```
6/18/2013 6:07:20 PM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and
Instance2792.5 (complete)
6/18/2013 6:07:20 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.blg has 486 samples.
6/18/2013 6:07:20 PM -- Creating test report ...
6/18/2013 6:07:23 PM -- Instance2792.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:23 PM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:23 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:23 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.xml has 478 samples gueried.
6/18/2013 6:07:23 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_55.html is saved.
6/18/2013 6:07:24 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:24 PM -- Verifying database checksums ...
6/18/2013 10:35:18 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 10:35:18 PM -- Performance logging ends.
6/18/2013 10:35:18 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 18 18 7 23.blg has 535 samples.
6/18/2013 10:35:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_23.html is saved.
6/18/2013 10:35:21 PM -- Verifying log checksums ...
6/18/2013 10:35:23 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 22 35 23.evt is saved.
```

```
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_35_23.evt is saved.
6/18/2013 10:35:23 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_35_23.xml is saved.
6/18/2013 10:35:23 PM -- Jetstress testing ends.
6/18/2013 11:31:02 PM -- Jetstress testing begins ...
6/18/2013 11:31:02 PM -- Prepare testing begins ...
6/18/2013 11:31:07 PM -- Attaching databases ...
6/18/2013 11:31:07 PM -- Prepare testing ends.
6/18/2013 11:31:07 PM -- Dispatching transactions begins ...
6/18/2013 11:31:07 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:07 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:13 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:13 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:18 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:18 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:18 PM -- Attaining prerequisites:
6/18/2013 11:32:48 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209364000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:32:49 PM -- Performance logging ends.
6/20/2013 9:25:01 AM -- JetInterop batch transaction stats: 634110, 632373, 632533, 632135 and 632684.
6/20/2013 9:25:02 AM -- Dispatching transactions ends.
6/20/2013 9:25:02 AM -- Shutting down databases ...
6/20/2013 9:25:03 AM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete) and
Instance2792.5 (complete)
6/20/2013 9:25:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 13.blg has 5757 samples.
6/20/2013 9:25:03 AM -- Creating test report ...
6/20/2013 9:25:31 AM -- Instance2792.1 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
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6/20/2013 9:25:31 AM -- Instance2792.4 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:31 AM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:31 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:31 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:31 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 13.xml has 5750 samples queried.
6/20/2013 9:25:31 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 13.html is saved.
6/20/2013 9:25:32 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:32 AM -- Verifying database checksums ...
6/20/2013 2:03:49 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/20/2013 2:03:49 PM -- Performance logging ends.
6/20/2013 2:03:49 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_31.blg has 556 samples.
6/20/2013 2:03:52 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 31.html is saved.
6/20/2013 2:03:52 PM -- Verifying log checksums ...
6/20/2013 2:03:54 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (13
log(s) processed) and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_3_54.evt is saved.
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 20 14 3 54.evt is saved.
6/20/2013 2:03:54 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_3_54.xml is saved.
6/20/2013 2:03:54 PM -- Jetstress testing ends.
6/20/2013 3:52:12 PM -- Jetstress testing begins ...
6/20/2013 3:52:12 PM -- Prepare testing begins ...
6/20/2013 3:52:17 PM -- Attaching databases ...
6/20/2013 3:52:17 PM -- Prepare testing ends.
6/20/2013 3:52:26 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:26 PM -- Backing up databases ...
6/20/2013 9:36:01 PM -- Performance logging ends.
6/20/2013 9:36:01 PM -- Instance2792.1 (100% processed), Instance2792.2 (100% processed), Instance2792.3 (100% processed), Instance2792.4
(100% processed) and Instance2792.5 (100% processed)
6/20/2013 9:36:01 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 17.blg has 686 samples.
```

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6/20/2013 9:36:01 PM -- Creating test report ...
6/20/2013 9:36:04 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_17.html is saved.
6/20/2013 9:36:04 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_36_4.evt is saved.
6/20/2013 9:36:04 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_36_4.evt is saved.
6/20/2013 9:36:04 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_36_4.xml is saved.
6/20/2013 9:36:04 PM -- Jetstress testing ends.
6/21/2013 8:33:01 AM -- Jetstress testing begins ...
6/21/2013 8:33:01 AM -- Prepare testing begins ...
6/21/2013 8:33:07 AM -- Attaching databases ...
6/21/2013 8:33:07 AM -- Prepare testing ends.
6/21/2013 8:33:07 AM -- Dispatching transactions begins ...
6/21/2013 8:33:07 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/21/2013 8:33:07 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:33:13 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:33:13 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:33:16 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:33:16 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:33:16 AM -- Generating log files ...
6/21/2013 9:41:36 AM -- C:\DB\DB1 (101.8% generated), C:\DB\DB2 (101.0% generated), C:\DB\DB3 (101.0% generated), C:\DB\DB4 (100.2%
generated) and C:\DB\DB5 (103.6% generated)
6/21/2013 9:41:36 AM -- Performance logging ends.
6/21/2013 9:41:36 AM -- JetInterop batch transaction stats: 21898, 21879, 21733, 21701 and 22260.
6/21/2013 9:41:36 AM -- Dispatching transactions ends.
6/21/2013 9:41:36 AM -- Shutting down databases ...
6/21/2013 9:41:37 AM -- Instance2792.1 (complete), Instance2792.2 (complete), Instance2792.3 (complete), Instance2792.4 (complete)
Instance2792.5 (complete)
6/21/2013 9:41:37 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_13.blg has 272 samples.
6/21/2013 9:41:37 AM -- Creating test report ...
6/21/2013 9:41:39 AM -- Instance2792.1 has 14.6 for I/O Database Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.2 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.2 has 0.9 for I/O Log Reads Average Latency.
```

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6/21/2013 9:41:39 AM -- Instance2792.3 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.4 has 14.6 for I/O Database Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.5 has 14.7 for I/O Database Reads Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:41:39 AM -- Instance2792.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:41:39 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:41:39 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:41:39 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_13.xml has 271 samples queried.
6/21/2013 9:41:39 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_13.html is saved.
6/28/2013 9:55:26 AM -- Performance logging begins (interval: 4000 ms).
6/28/2013 9:55:26 AM -- Recovering databases ...
6/28/2013 10:07:10 AM -- Performance logging ends.
6/28/2013 10:07:10 AM -- Instance2792.1 (695.9048609). Instance2792.2 (668.3238841). Instance2792.3 (682.1143725). Instance2792.4
(687.9488099) and Instance2792.5 (703.5957102)
6/28/2013 10:07:10 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_55_23.blg has 174 samples.
6/28/2013 10:07:10 AM -- Creating test report ...
```

Server 2 – JS7

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance2224.1	505	705.1869204
Instance2224.2	507	709.1649459
Instance2224.3	503	693.7832473
Instance2224.4	507	691.9268354
Instance2224.5	501	689.0096167

Database Configuration

	3
Instance2224.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance2224.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance2224.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance2224.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance2224.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	8.312	0.892	679.600	4.310	40693.175	32768.000	8.966	0.004	6.464	0.004	232534.275	2.943
Instance2224.2	8.332	0.966	677.131	4.302	40589.792	32768.000	9.029	0.004	6.453	0.004	232502.545	2.926
Instance2224.3	8.268	0.893	685.583	4.359	40794.563	32768.000	8.526	0.000	6.538	0.000	232537.887	0.000
Instance2224.4	8.082	0.853	707.848	4.411	40667.896	32768.000	9.437	0.000	6.616	0.000	232525.050	0.000
Instance2224.5	8.266	0.919	690.299	4.358	40714.631	32768.000	8.815	0.000	6.537	0.000	232546.458	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance2224.1	26.664	261952.408
Instance2224.2	27.054	262039.815
Instance2224.3	27.315	261965.386
Instance2224.4	26.936	261991.302
Instance2224.5	26.849	261995.045

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance2224.1	8.312	0.892	706.264	4.310	49046.522	32768.000	8.966	0.004	6.464	0.004	232534.275	2.943
Instance2224.2	8.332	0.966	704.185	4.302	49097.672	32768.000	9.029	0.004	6.453	0.004	232502.545	2.926
Instance2224.3	8.268	0.893	712.898	4.359	49268.799	32768.000	8.526	0.000	6.538	0.000	232537.887	0.000
Instance2224.4	8.082	0.853	734.785	4.411	48781.333	32768.000	9.437	0.000	6.616	0.000	232525.050	0.000
Instance2224.5	8.266	0.919	717.148	4.358	48998.928	32768.000	8.815	0.000	6.537	0.000	232546.458	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.779	0.000	8.660
Available MBytes	28529.744	28486.000	29710.000
Free System Page Table Entries	33555716.205	33555666.000	33557710.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	89361291.636	89284608.000	89665536.000
Pool Paged Bytes	225867799.273	225828864.000	226000896.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:43 AM -- Jetstress testing begins ...
6/18/2013 10:56:43 AM -- Prepare testing begins ...
6/18/2013 10:56:49 AM -- Attaching databases ...
6/18/2013 10:56:49 AM -- Prepare testing ends.
6/18/2013 10:56:49 AM -- Dispatching transactions begins ...
6/18/2013 10:56:49 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:49 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:55 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:55 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:00 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:00 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:00 AM -- Attaining prerequisites:
6/18/2013 10:59:23 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212850000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 12:59:24 PM -- Performance logging ends.
6/18/2013 1:01:26 PM -- JetInterop batch transaction stats: 29643, 29265, 29554, 29573 and 29758.
6/18/2013 1:01:26 PM -- Dispatching transactions ends.
6/18/2013 1:01:26 PM -- Shutting down databases ...
6/18/2013 1:01:27 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and
Instance2224.5 (complete)
6/18/2013 1:01:27 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 56 55.blg has 488 samples.
6/18/2013 1:01:27 PM -- Creating test report ...
6/18/2013 1:01:30 PM -- Instance2224.1 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 8.7 for I/O Database Reads Average Latency.
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6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:30 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:30 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:30 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.xml has 478 samples gueried.
6/18/2013 1:01:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_55.html is saved.
6/18/2013 1:01:32 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:32 PM -- Verifying database checksums ...
6/18/2013 1:02:45 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:02:46 PM -- Verifying log checksums ...
6/18/2013 1:02:46 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 13 2 46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_46.evt is saved.
6/18/2013 1:02:46 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_46.xml is saved.
6/18/2013 1:02:46 PM -- Jetstress testing ends.
6/18/2013 1:10:33 PM -- Jetstress testing begins ...
6/18/2013 1:10:33 PM -- Prepare testing begins ...
6/18/2013 1:10:39 PM -- Attaching databases ...
6/18/2013 1:10:39 PM -- Prepare testing ends.
6/18/2013 1:10:39 PM -- Dispatching transactions begins ...
6/18/2013 1:10:39 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:39 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:45 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:45 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:49 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:49 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:49 PM -- Attaining prerequisites:
6/18/2013 1:12:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214808000.0 (lower bound: 1207960000.0, upper
bound: none)
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6/18/2013 3:12:21 PM -- Performance logging ends.
6/18/2013 3:14:02 PM -- JetInterop batch transaction stats: 40566, 40795, 40522, 40949 and 40868.
6/18/2013 3:14:02 PM -- Dispatching transactions ends.
6/18/2013 3:14:02 PM -- Shutting down databases ...
6/18/2013 3:14:03 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and
Instance2224.5 (complete)
6/18/2013 3:14:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.blg has 485 samples.
6/18/2013 3:14:03 PM -- Creating test report ...
6/18/2013 3:14:06 PM -- Instance2224.1 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:06 PM -- Instance2224.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.xml has 478 samples gueried.
6/18/2013 3:14:07 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_45.html is saved.
6/18/2013 3:14:08 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:08 PM -- Verifying database checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (4% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed) and
C:\DB\DB5 (4% processed)
6/18/2013 3:23:37 PM -- Verifying log checksums ...
6/18/2013 3:23:37 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
```

```
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_37.evt is saved.
6/18/2013 3:23:37 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_37.xml is saved.
6/18/2013 3:23:37 PM -- Jetstress testing ends.
6/18/2013 3:31:36 PM -- Jetstress testing begins ...
6/18/2013 3:31:36 PM -- Prepare testing begins ...
6/18/2013 3:31:42 PM -- Attaching databases ...
6/18/2013 3:31:42 PM -- Prepare testing ends.
6/18/2013 3:31:42 PM -- Dispatching transactions begins ...
6/18/2013 3:31:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:47 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:47 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:53 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:53 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:53 PM -- Attaining prerequisites:
6/18/2013 3:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1215050000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:44 PM -- Performance logging ends.
6/18/2013 6:07:13 PM -- JetInterop batch transaction stats: 50126, 50577, 50218, 50339 and 50236.
6/18/2013 6:07:14 PM -- Dispatching transactions ends.
6/18/2013 6:07:14 PM -- Shutting down databases ...
6/18/2013 6:07:15 PM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and
Instance2224.5 (complete)
6/18/2013 6:07:15 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.blg has 486 samples.
6/18/2013 6:07:15 PM -- Creating test report ...
6/18/2013 6:07:18 PM -- Instance2224.1 has 12.1 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
```

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6/18/2013 6:07:18 PM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:18 PM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:18 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:18 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 47.xml has 478 samples queried.
6/18/2013 6:07:18 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_47.html is saved.
6/18/2013 6:07:19 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:19 PM -- Verifying database checksums ...
6/18/2013 10:37:31 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 10:37:31 PM -- Performance logging ends.
6/18/2013 10:37:31 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.blg has 540 samples.
6/18/2013 10:37:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_18.html is saved.
6/18/2013 10:37:34 PM -- Verifying log checksums ...
6/18/2013 10:37:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_37_35.evt is saved.
6/18/2013 10:37:36 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_37_36.xml is saved.
6/18/2013 10:37:36 PM -- Jetstress testing ends.
6/18/2013 11:31:06 PM -- Jetstress testing begins ...
6/18/2013 11:31:06 PM -- Prepare testing begins ...
6/18/2013 11:31:11 PM -- Attaching databases ...
6/18/2013 11:31:11 PM -- Prepare testing ends.
6/18/2013 11:31:11 PM -- Dispatching transactions begins ...
6/18/2013 11:31:11 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:11 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:17 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:17 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
```

6/18/2013 11:31:23 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/18/2013 11:31:23 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:23 PM -- Attaining prerequisites:
6/18/2013 11:32:55 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210425000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:32:55 PM -- Performance logging ends.
6/20/2013 9:25:06 AM -- JetInterop batch transaction stats: 640059, 639149, 641340, 638945 and 639845.
6/20/2013 9:25:06 AM -- Dispatching transactions ends.
6/20/2013 9:25:06 AM -- Shutting down databases ...
6/20/2013 9:25:07 AM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and
Instance2224.5 (complete)
6/20/2013 9:25:07 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.blg has 5757 samples.
6/20/2013 9:25:07 AM -- Creating test report ...
6/20/2013 9:25:32 AM -- Instance2224.1 has 12.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:32 AM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:32 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:32 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:32 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.xml has 5750 samples gueried.
6/20/2013 9:25:32 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_17.html is saved.
6/20/2013 9:25:33 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:33 AM -- Verifying database checksums ...
```

```
6/20/2013 2:05:47 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/20/2013 2:05:47 PM -- Performance logging ends.
6/20/2013 2:05:47 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 32.blg has 560 samples.
6/20/2013 2:05:51 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_32.html is saved.
6/20/2013 2:05:51 PM -- Verifying log checksums ...
6/20/2013 2:05:52 PM -- C:\DB\DB1 (13 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 5 52.evt is saved.
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 20 14 5 52.evt is saved.
6/20/2013 2:05:52 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_5_52.xml is saved.
6/20/2013 2:05:52 PM -- Jetstress testing ends.
6/20/2013 3:52:14 PM -- Jetstress testing begins ...
6/20/2013 3:52:14 PM -- Prepare testing begins ...
6/20/2013 3:52:20 PM -- Attaching databases ...
6/20/2013 3:52:20 PM -- Prepare testing ends.
6/20/2013 3:52:28 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:28 PM -- Backing up databases ...
6/20/2013 9:35:37 PM -- Performance logging ends.
6/20/2013 9:35:37 PM -- Instance2224.1 (100% processed), Instance2224.2 (100% processed), Instance2224.3 (100% processed),
Instance2224.4 (100% processed) and Instance2224.5 (100% processed)
6/20/2013 9:35:37 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_20.blg has 685 samples.
6/20/2013 9:35:37 PM -- Creating test report ...
6/20/2013 9:35:41 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 20.html is saved.
6/20/2013 9:35:41 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_35_41.evt is saved.
6/20/2013 9:35:41 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_35_41.evt is saved.
6/20/2013 9:35:41 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_35_41.xml is saved.
6/20/2013 9:35:41 PM -- Jetstress testing ends.
6/21/2013 8:32:58 AM -- Jetstress testing begins ...
6/21/2013 8:32:58 AM -- Prepare testing begins ...
6/21/2013 8:33:04 AM -- Attaching databases ...
6/21/2013 8:33:04 AM -- Prepare testing ends.
6/21/2013 8:33:04 AM -- Dispatching transactions begins ...
6/21/2013 8:33:04 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
```

```
6/21/2013 8:33:04 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:33:10 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:33:10 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:33:14 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:33:14 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:33:14 AM -- Generating log files ...
6/21/2013 9:40:49 AM -- C:\DB\DB1 (101.0% generated), C:\DB\DB2 (101.4% generated), C:\DB\DB3 (100.6% generated), C:\DB\DB4 (101.4%
generated) and C:\DB\DB5 (100.2% generated)
6/21/2013 9:40:49 AM -- Performance logging ends.
6/21/2013 9:40:49 AM -- JetInterop batch transaction stats: 21891, 21916, 21946, 21987 and 21674.
6/21/2013 9:40:49 AM -- Dispatching transactions ends.
6/21/2013 9:40:49 AM -- Shutting down databases ...
6/21/2013 9:40:50 AM -- Instance2224.1 (complete), Instance2224.2 (complete), Instance2224.3 (complete), Instance2224.4 (complete) and
Instance2224.5 (complete)
6/21/2013 9:40:50 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_10.blg has 269 samples.
6/21/2013 9:40:50 AM -- Creating test report ...
6/21/2013 9:40:52 AM -- Instance2224.1 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.2 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.3 has 14.4 for I/O Database Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.4 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.5 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:40:52 AM -- Instance2224.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:40:52 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:40:52 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:40:52 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 33 10.xml has 268 samples gueried.
```

6/21/2013 9:40:52 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_10.html is saved.

6/28/2013 9:55:42 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:55:42 AM -- Recovering databases ...

6/28/2013 10:07:31 AM -- Performance logging ends.

 $6/28/2013\ 10:07:31\ AM\ --\ Instance 2224.1\ (705.1869204),\ Instance 2224.2\ (709.1649459),\ Instance 2224.3\ (693.7832473),\ Instance 2224.4\ (709.1649459),\ Instance 2224.3\ (709.164949),\ Instance 2224.3\ (709.164949$

(691.9268354) and Instance2224.5 (689.0096167)

6/28/2013 10:07:32 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_55_38.blg has 176 samples.

6/28/2013 10:07:32 AM -- Creating test report ...

Server 3 – JS8

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance3352.1	501	792.1625558
Instance3352.2	507	710.2147052
Instance3352.3	508	701.462993
Instance3352.4	510	713.397146
Instance3352.5	503	708.093078

Database Configuration

	3
Instance3352.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3352.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3352.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3352.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3352.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	9.575	1.005	576.139	3.792	40667.069	32768.000	9.457	0.000	5.688	0.000	232529.527	0.000
Instance3352.2	8.418	0.918	674.932	4.293	40653.889	32768.000	9.042	0.000	6.440	0.000	232494.297	0.000
Instance3352.3	8.427	0.941	671.082	4.360	40631.717	32768.000	9.280	0.002	6.540	0.004	232566.657	2.960
Instance3352.4	8.504	0.931	663.161	4.294	40549.911	32768.000	8.518	0.002	6.442	0.004	232469.332	2.909
Instance3352.5	8.488	0.934	661.375	4.275	40544.750	32768.000	8.901	0.000	6.413	0.000	232536.104	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3352.1	24.676	261959.959
Instance3352.2	26.696	261966.121
Instance3352.3	26.815	262044.309
Instance3352.4	26.679	262004.268
Instance3352.5	26.744	261964.164

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3352.1	9.575	1.005	600.815	3.792	49755.635	32768.000	9.457	0.000	5.688	0.000	232529.527	0.000
Instance3352.2	8.418	0.918	701.628	4.293	49074.642	32768.000	9.042	0.000	6.440	0.000	232494.297	0.000
Instance3352.3	8.427	0.941	697.898	4.360	49139.088	32768.000	9.280	0.002	6.540	0.004	232566.657	2.960
Instance3352.4	8.504	0.931	689.840	4.294	49114.415	32768.000	8.518	0.002	6.442	0.004	232469.332	2.909
Instance3352.5	8.488	0.934	688.119	4.275	49150.338	32768.000	8.901	0.000	6.413	0.000	232536.104	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.573	0.000	5.742
Available MBytes	28566.832	28522.000	29738.000
Free System Page Table Entries	33555700.260	33555665.000	33557707.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	91847157.551	91553792.000	92319744.000
Pool Paged Bytes	237284916.245	237252608.000	237395968.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:47 AM -- Jetstress testing begins ...
6/18/2013 10:56:47 AM -- Prepare testing begins ...
6/18/2013 10:56:53 AM -- Attaching databases ...
6/18/2013 10:56:53 AM -- Prepare testing ends.
6/18/2013 10:56:53 AM -- Dispatching transactions begins ...
6/18/2013 10:56:53 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:53 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:56:59 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:56:59 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:05 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:05 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:05 AM -- Attaining prerequisites:
6/18/2013 10:59:35 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1219310000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 12:59:36 PM -- Performance logging ends.
6/18/2013 1:01:30 PM -- JetInterop batch transaction stats: 28755, 28320, 28835, 28726 and 28827.
6/18/2013 1:01:30 PM -- Dispatching transactions ends.
6/18/2013 1:01:30 PM -- Shutting down databases ...
6/18/2013 1:01:32 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and
Instance3352.5 (complete)
6/18/2013 1:01:32 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 56 59.blg has 489 samples.
6/18/2013 1:01:32 PM -- Creating test report ...
6/18/2013 1:01:35 PM -- Instance3352.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 8.7 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 8.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:35 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_56_59.xml has 479 samples gueried.
6/18/2013 1:01:36 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 56 59.html is saved.
6/18/2013 1:01:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:37 PM -- Verifying database checksums ...
6/18/2013 1:02:50 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:02:51 PM -- Verifying log checksums ...
6/18/2013 1:02:51 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_2_51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_51.evt is saved.
6/18/2013 1:02:51 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_51.xml is saved.
6/18/2013 1:02:51 PM -- Jetstress testing ends.
6/18/2013 1:10:36 PM -- Jetstress testing begins ...
6/18/2013 1:10:36 PM -- Prepare testing begins ...
6/18/2013 1:10:42 PM -- Attaching databases ...
6/18/2013 1:10:42 PM -- Prepare testing ends.
6/18/2013 1:10:42 PM -- Dispatching transactions begins ...
6/18/2013 1:10:42 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:42 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:48 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:48 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:52 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:52 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:52 PM -- Attaining prerequisites:
6/18/2013 1:12:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214845000.0 (lower bound: 1207960000.0, upper
bound: none)
```

```
6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:56 PM -- JetInterop batch transaction stats: 39626, 39706, 39573, 39658 and 39994.
6/18/2013 3:13:56 PM -- Dispatching transactions ends.
6/18/2013 3:13:56 PM -- Shutting down databases ...
6/18/2013 3:13:58 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and
Instance3352.5 (complete)
6/18/2013 3:13:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.blg has 485 samples.
6/18/2013 3:13:58 PM -- Creating test report ...
6/18/2013 3:14:01 PM -- Instance3352.1 has 13.5 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:14:01 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:14:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:14:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.xml has 478 samples queried.
6/18/2013 3:14:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_48.html is saved.
6/18/2013 3:14:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:14:02 PM -- Verifying database checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (4% processed), C:\DB\DB3 (4% processed), C:\DB\DB4 (4% processed)
C:\DB\DB5 (3% processed)
6/18/2013 3:23:26 PM -- Verifying log checksums ...
6/18/2013 3:23:26 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
```

```
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_26.evt is saved.
6/18/2013 3:23:26 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_26.xml is saved.
6/18/2013 3:23:26 PM -- Jetstress testing ends.
6/18/2013 3:31:24 PM -- Jetstress testing begins ...
6/18/2013 3:31:24 PM -- Prepare testing begins ...
6/18/2013 3:31:30 PM -- Attaching databases ...
6/18/2013 3:31:30 PM -- Prepare testing ends.
6/18/2013 3:31:30 PM -- Dispatching transactions begins ...
6/18/2013 3:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:41 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:41 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:41 PM -- Attaining prerequisites:
6/18/2013 3:33:25 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211384000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:25 PM -- Performance logging ends.
6/18/2013 6:07:01 PM -- JetInterop batch transaction stats: 49011, 49241, 49179, 49282 and 49742.
6/18/2013 6:07:01 PM -- Dispatching transactions ends.
6/18/2013 6:07:01 PM -- Shutting down databases ...
6/18/2013 6:07:03 PM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete)
Instance3352.5 (complete)
6/18/2013 6:07:03 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.blg has 486 samples.
6/18/2013 6:07:03 PM -- Creating test report ...
6/18/2013 6:07:06 PM -- Instance3352.1 has 13.3 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
```

```
6/18/2013 6:07:06 PM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 11.8 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:07:06 PM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:07:06 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:06 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 36.xml has 479 samples queried.
6/18/2013 6:07:06 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_36.html is saved.
6/18/2013 6:07:07 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:07 PM -- Verifying database checksums ...
6/18/2013 11:04:43 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 11:04:43 PM -- Performance logging ends.
6/18/2013 11:04:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 18 18 7 6.blg has 594 samples.
6/18/2013 11:04:47 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_6.html is saved.
6/18/2013 11:04:47 PM -- Verifying log checksums ...
6/18/2013 11:04:48 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 23 4 48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_4_48.evt is saved.
6/18/2013 11:04:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 23 4 48.xml is saved.
6/18/2013 11:04:48 PM -- Jetstress testing ends.
6/18/2013 11:31:08 PM -- Jetstress testing begins ...
6/18/2013 11:31:08 PM -- Prepare testing begins ...
6/18/2013 11:31:14 PM -- Attaching databases ...
6/18/2013 11:31:14 PM -- Prepare testing ends.
6/18/2013 11:31:14 PM -- Dispatching transactions begins ...
6/18/2013 11:31:14 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:14 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:20 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:20 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
```

6/18/2013 11:31:25 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/18/2013 11:31:25 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:25 PM -- Attaining prerequisites:
6/18/2013 11:33:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212363000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:04 PM -- Performance logging ends.
6/20/2013 9:25:09 AM -- JetInterop batch transaction stats: 634106, 632752, 634222, 633891 and 633650.
6/20/2013 9:25:09 AM -- Dispatching transactions ends.
6/20/2013 9:25:09 AM -- Shutting down databases ...
6/20/2013 9:25:11 AM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete) and
Instance3352.5 (complete)
6/20/2013 9:25:11 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.blg has 5757 samples.
6/20/2013 9:25:11 AM -- Creating test report ...
6/20/2013 9:25:37 AM -- Instance3352.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 11.9 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:37 AM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:37 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:37 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:37 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.xml has 5750 samples gueried.
6/20/2013 9:25:37 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_20.html is saved.
6/20/2013 9:25:38 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:38 AM -- Verifying database checksums ...
```

```
6/20/2013 2:32:35 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
and C:\DB\DB5 (100% processed)
6/20/2013 2:32:35 PM -- Performance logging ends.
6/20/2013 2:32:35 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_37.blg has 613 samples.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_37.html is saved.
6/20/2013 2:32:40 PM -- Verifying log checksums ...
6/20/2013 2:32:40 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (13 log(s) processed), C:\DB\DB4 (11
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 32 40.evt is saved.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 20 14 32 40.evt is saved.
6/20/2013 2:32:40 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_32_40.xml is saved.
6/20/2013 2:32:40 PM -- Jetstress testing ends.
6/20/2013 3:52:17 PM -- Jetstress testing begins ...
6/20/2013 3:52:17 PM -- Prepare testing begins ...
6/20/2013 3:52:22 PM -- Attaching databases ...
6/20/2013 3:52:22 PM -- Prepare testing ends.
6/20/2013 3:52:31 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:31 PM -- Backing up databases ...
6/20/2013 9:23:49 PM -- Performance logging ends.
6/20/2013 9:23:49 PM -- Instance3352.1 (100% processed), Instance3352.2 (100% processed), Instance3352.3 (100% processed), Instance3352.4
(100% processed) and Instance3352.5 (100% processed)
6/20/2013 9:23:49 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_22.blg has 661 samples.
6/20/2013 9:23:49 PM -- Creating test report ...
6/20/2013 9:23:52 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 22.html is saved.
6/20/2013 9:23:53 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_23_52.evt is saved.
6/20/2013 9:23:53 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_23_52.evt is saved.
6/20/2013 9:23:53 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_23_53.xml is saved.
6/20/2013 9:23:53 PM -- Jetstress testing ends.
6/21/2013 8:32:55 AM -- Jetstress testing begins ...
6/21/2013 8:32:55 AM -- Prepare testing begins ...
6/21/2013 8:33:00 AM -- Attaching databases ...
6/21/2013 8:33:00 AM -- Prepare testing ends.
6/21/2013 8:33:00 AM -- Dispatching transactions begins ...
6/21/2013 8:33:00 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
```

```
6/21/2013 8:33:00 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:33:07 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:33:07 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:33:10 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:33:10 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:33:10 AM -- Generating log files ...
6/21/2013 9:40:08 AM -- C:\DB\DB1 (100.2% generated), C:\DB\DB2 (101.4% generated), C:\DB\DB3 (101.6% generated), C:\DB\DB4 (102.0%
generated) and C:\DB\DB5 (100.6% generated)
6/21/2013 9:40:08 AM -- Performance logging ends.
6/21/2013 9:40:08 AM -- JetInterop batch transaction stats: 21787, 22034, 21759, 22029 and 21594.
6/21/2013 9:40:08 AM -- Dispatching transactions ends.
6/21/2013 9:40:08 AM -- Shutting down databases ...
6/21/2013 9:40:10 AM -- Instance3352.1 (complete), Instance3352.2 (complete), Instance3352.3 (complete), Instance3352.4 (complete)
Instance3352.5 (complete)
6/21/2013 9:40:10 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 33 7.blg has 267 samples.
6/21/2013 9:40:10 AM -- Creating test report ...
6/21/2013 9:40:11 AM -- Instance3352.1 has 15.4 for I/O Database Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.1 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.1 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.2 has 14.2 for I/O Database Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.2 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.2 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.3 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.3 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.3 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.4 has 14.2 for I/O Database Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.4 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.4 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.5 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.5 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:40:11 AM -- Instance3352.5 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:40:11 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:40:11 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
```

6/21/2013 9:40:11 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 33 7.xml has 266 samples queried.

6/21/2013 9:40:11 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_7.html is saved.

6/28/2013 9:55:57 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:55:57 AM -- Recovering databases ...

6/28/2013 10:09:09 AM -- Performance logging ends.

6/28/2013 10:09:09 AM -- Instance3352.1 (792.1625558), Instance3352.2 (710.2147052), Instance3352.3 (701.462993), Instance3352.4

(713.397146) and Instance3352.5 (708.093078)

6/28/2013 10:09:10 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_55_53.blg has 196 samples.

6/28/2013 10:09:10 AM -- Creating test report ...

Server 4 – JS9

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance1424.1	502	800.1186578
Instance1424.2	501	703.5846202
Instance1424.3	511	725.8617058
Instance1424.4	509	727.4529262
Instance1424.5	504	706.2366542

Database Configuration

Instance1424.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance1424.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance1424.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance1424.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance1424.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	9.407	1.135	587.894	3.753	40510.131	32768.000	9.343	0.000	5.630	0.000	232542.729	0.000
Instance1424.2	8.504	1.018	671.577	4.274	40598.868	32768.000	8.675	0.000	6.411	0.000	232430.876	0.000
Instance1424.3	8.513	1.159	655.346	4.231	40605.869	32768.000	9.504	0.000	6.346	0.000	232501.785	0.000
Instance1424.4	8.511	1.049	664.678	4.206	40526.307	32768.000	8.861	0.000	6.309	0.000	232477.223	0.000
Instance1424.5	8.460	1.029	670.428	4.292	40633.422	32768.000	9.042	0.000	6.439	0.000	232528.202	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance1424.1	25.280	261993.726
Instance1424.2	26.173	261882.182
Instance1424.3	26.267	261854.818
Instance1424.4	26.172	261997.789
Instance1424.5	26.213	262044.725

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance1424.1	9.407	1.135	613.174	3.753	49641.465	32768.000	9.343	0.000	5.630	0.000	232542.729	0.000
Instance1424.2	8.504	1.018	697.750	4.274	48899.371	32768.000	8.675	0.000	6.411	0.000	232430.876	0.000
Instance1424.3	8.513	1.159	681.613	4.231	49132.182	32768.000	9.504	0.000	6.346	0.000	232501.785	0.000
Instance1424.4	8.511	1.049	690.849	4.206	48916.389	32768.000	8.861	0.000	6.309	0.000	232477.223	0.000
Instance1424.5	8.460	1.029	696.641	4.292	48964.509	32768.000	9.042	0.000	6.439	0.000	232528.202	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.552	0.000	4.228
Available MBytes	28526.965	28481.000	29691.000
Free System Page Table Entries	33555708.278	33555665.000	33557196.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	84860638.384	84766720.000	85229568.000
Pool Paged Bytes	248047429.818	248000512.000	248102912.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:51 AM -- Jetstress testing begins ...
6/18/2013 10:56:51 AM -- Prepare testing begins ...
6/18/2013 10:56:58 AM -- Attaching databases ...
6/18/2013 10:56:58 AM -- Prepare testing ends.
6/18/2013 10:56:58 AM -- Dispatching transactions begins ...
6/18/2013 10:56:58 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:56:58 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:04 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:04 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:08 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:08 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:08 AM -- Attaining prerequisites:
6/18/2013 10:59:41 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209700000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:28 PM -- JetInterop batch transaction stats: 28950, 29007, 29113, 28462 and 29068.
6/18/2013 1:01:28 PM -- Dispatching transactions ends.
6/18/2013 1:01:28 PM -- Shutting down databases ...
6/18/2013 1:01:30 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and
Instance1424.5 (complete)
6/18/2013 1:01:30 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 4.blg has 489 samples.
6/18/2013 1:01:30 PM -- Creating test report ...
6/18/2013 1:01:34 PM -- Instance1424.1 has 9.8 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 8.7 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:34 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_4.xml has 478 samples gueried.
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 4.html is saved.
6/18/2013 1:01:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:35 PM -- Verifying database checksums ...
6/18/2013 1:02:54 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:02:55 PM -- Verifying log checksums ...
6/18/2013 1:02:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 13 2 55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_2_55.evt is saved.
6/18/2013 1:02:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_2_55.xml is saved.
6/18/2013 1:02:55 PM -- Jetstress testing ends.
6/18/2013 1:10:38 PM -- Jetstress testing begins ...
6/18/2013 1:10:38 PM -- Prepare testing begins ...
6/18/2013 1:10:44 PM -- Attaching databases ...
6/18/2013 1:10:44 PM -- Prepare testing ends.
6/18/2013 1:10:44 PM -- Dispatching transactions begins ...
6/18/2013 1:10:44 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:44 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:50 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:50 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:10:55 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:10:55 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:10:55 PM -- Attaining prerequisites:
6/18/2013 1:12:32 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1218224000.0 (lower bound: 1207960000.0, upper
bound: none)
```

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6/18/2013 3:12:33 PM -- Performance logging ends.
6/18/2013 3:13:51 PM -- JetInterop batch transaction stats: 40165, 40015, 39927, 39446 and 40003.
6/18/2013 3:13:51 PM -- Dispatching transactions ends.
6/18/2013 3:13:51 PM -- Shutting down databases ...
6/18/2013 3:13:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and
Instance1424.5 (complete)
6/18/2013 3:13:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.blg has 485 samples.
6/18/2013 3:13:53 PM -- Creating test report ...
6/18/2013 3:13:56 PM -- Instance1424.1 has 13.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.xml has 478 samples gueried.
6/18/2013 3:13:56 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_50.html is saved.
6/18/2013 3:13:57 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:57 PM -- Verifying database checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (4% processed) and
C:\DB\DB5 (1% processed)
6/18/2013 3:23:18 PM -- Verifying log checksums ...
6/18/2013 3:23:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
```

```
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_18.evt is saved.
6/18/2013 3:23:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_18.xml is saved.
6/18/2013 3:23:18 PM -- Jetstress testing ends.
6/18/2013 3:31:19 PM -- Jetstress testing begins ...
6/18/2013 3:31:19 PM -- Prepare testing begins ...
6/18/2013 3:31:24 PM -- Attaching databases ...
6/18/2013 3:31:24 PM -- Prepare testing ends.
6/18/2013 3:31:24 PM -- Dispatching transactions begins ...
6/18/2013 3:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:35 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:35 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:35 PM -- Attaining prerequisites:
6/18/2013 3:33:21 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211597000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:21 PM -- Performance logging ends.
6/18/2013 6:06:51 PM -- JetInterop batch transaction stats: 49885, 49854, 49826, 49630 and 49416.
6/18/2013 6:06:51 PM -- Dispatching transactions ends.
6/18/2013 6:06:51 PM -- Shutting down databases ...
6/18/2013 6:06:53 PM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and
Instance1424.5 (complete)
6/18/2013 6:06:53 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.blg has 486 samples.
6/18/2013 6:06:53 PM -- Creating test report ...
6/18/2013 6:06:56 PM -- Instance1424.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
```

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6/18/2013 6:06:56 PM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:56 PM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:56 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:56 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:56 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 30.xml has 478 samples queried.
6/18/2013 6:06:57 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_30.html is saved.
6/18/2013 6:06:58 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:58 PM -- Verifying database checksums ...
6/18/2013 11:23:57 PM -- C:\DB\DB1 (36% processed), C:\DB\DB2 (38% processed), C:\DB\DB3 (38% processed), C:\DB\DB4 (100% processed)
and C:\DB\DB5 (38% processed)
6/18/2013 11:23:58 PM -- Verifying log checksums ...
6/18/2013 11:23:58 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_23_58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 18 23 23 58.evt is saved.
6/18/2013 11:23:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_23_58.xml is saved.
6/18/2013 11:23:58 PM -- Jetstress testing ends.
6/18/2013 11:31:12 PM -- Jetstress testing begins ...
6/18/2013 11:31:12 PM -- Prepare testing begins ...
6/18/2013 11:31:18 PM -- Attaching databases ...
6/18/2013 11:31:18 PM -- Prepare testing ends.
6/18/2013 11:31:18 PM -- Dispatching transactions begins ...
6/18/2013 11:31:18 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:18 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:23 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:23 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:29 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:29 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:29 PM -- Attaining prerequisites:
```

```
6/18/2013 11:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211363000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:08 PM -- Performance logging ends.
6/20/2013 9:25:13 AM -- JetInterop batch transaction stats: 640995, 642366, 641371, 642573 and 642109.
6/20/2013 9:25:13 AM -- Dispatching transactions ends.
6/20/2013 9:25:13 AM -- Shutting down databases ...
6/20/2013 9:25:14 AM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and
Instance1424.5 (complete)
6/20/2013 9:25:14 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 23.blg has 5757 samples.
6/20/2013 9:25:14 AM -- Creating test report ...
6/20/2013 9:25:40 AM -- Instance1424.1 has 13.2 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:40 AM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:40 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:40 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:40 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_23.xml has 5750 samples gueried.
6/20/2013 9:25:40 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 23.html is saved.
6/20/2013 9:25:41 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:41 AM -- Verifying database checksums ...
6/20/2013 2:29:53 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/20/2013 2:29:53 PM -- Performance logging ends.
```

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6/20/2013 2:29:53 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_40.blg has 608 samples.
6/20/2013 2:29:57 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_40.html is saved.
6/20/2013 2:29:57 PM -- Verifying log checksums ...
6/20/2013 2:29:58 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (13 log(s) processed)
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_29_58.evt is saved.
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_29_58.evt is saved.
6/20/2013 2:29:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_29_58.xml is saved.
6/20/2013 2:29:58 PM -- Jetstress testing ends.
6/20/2013 3:52:19 PM -- Jetstress testing begins ...
6/20/2013 3:52:19 PM -- Prepare testing begins ...
6/20/2013 3:52:25 PM -- Attaching databases ...
6/20/2013 3:52:25 PM -- Prepare testing ends.
6/20/2013 3:52:33 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:33 PM -- Backing up databases ...
6/20/2013 9:20:14 PM -- Performance logging ends.
6/20/2013 9:20:14 PM -- Instance1424.1 (100% processed), Instance1424.2 (100% processed), Instance1424.3 (100% processed), Instance1424.4
(100% processed) and Instance1424.5 (100% processed)
6/20/2013 9:20:14 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_25.blg has 654 samples.
6/20/2013 9:20:14 PM -- Creating test report ...
6/20/2013 9:20:17 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_25.html is saved.
6/20/2013 9:20:17 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 21 20 17.evt is saved.
6/20/2013 9:20:17 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_20_17.evt is saved.
6/20/2013 9:20:17 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 20 21 20 17.xml is saved.
6/20/2013 9:20:17 PM -- Jetstress testing ends.
6/21/2013 8:32:51 AM -- Jetstress testing begins ...
6/21/2013 8:32:51 AM -- Prepare testing begins ...
6/21/2013 8:32:57 AM -- Attaching databases ...
6/21/2013 8:32:57 AM -- Prepare testing ends.
6/21/2013 8:32:57 AM -- Dispatching transactions begins ...
6/21/2013 8:32:57 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/21/2013 8:32:57 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:33:03 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:33:03 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
```

6/21/2013 8:33:07 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/21/2013 8:33:07 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:33:07 AM -- Generating log files ...
6/21/2013 9:39:31 AM -- C:\DB\DB1 (100.4% generated), C:\DB\DB2 (100.2% generated), C:\DB\DB3 (102.2% generated), C:\DB\DB4 (101.8%
generated) and C:\DB\DB5 (100.8% generated)
6/21/2013 9:39:31 AM -- Performance logging ends.
6/21/2013 9:39:31 AM -- JetInterop batch transaction stats: 21958, 21782, 22053, 21873 and 21807.
6/21/2013 9:39:31 AM -- Dispatching transactions ends.
6/21/2013 9:39:31 AM -- Shutting down databases ...
6/21/2013 9:39:33 AM -- Instance1424.1 (complete), Instance1424.2 (complete), Instance1424.3 (complete), Instance1424.4 (complete) and
Instance1424.5 (complete)
6/21/2013 9:39:33 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_3.blg has 265 samples.
6/21/2013 9:39:33 AM -- Creating test report ...
6/21/2013 9:39:34 AM -- Instance1424.1 has 15.2 for I/O Database Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.2 has 13.9 for I/O Database Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.2 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.2 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.3 has 13.8 for I/O Database Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.3 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.3 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.4 has 13.9 for I/O Database Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.4 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.4 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.5 has 13.8 for I/O Database Reads Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.5 has 1.0 for I/O Log Writes Average Latency.
6/21/2013 9:39:34 AM -- Instance1424.5 has 1.0 for I/O Log Reads Average Latency.
6/21/2013 9:39:34 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:39:34 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:39:34 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_3.xml has 264 samples gueried.
6/21/2013 9:39:34 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_33_3.html is saved.
6/28/2013 9:56:10 AM -- Performance logging begins (interval: 4000 ms).
6/28/2013 9:56:10 AM -- Recovering databases ...
```

6/28/2013 10:09:30 AM -- Performance logging ends.

6/28/2013 10:09:30 AM -- Instance1424.1 (800.1186578), Instance1424.2 (703.5846202), Instance1424.3 (725.8617058), Instance1424.4 (727.4529262) and Instance1424.5 (706.2366542)

6/28/2013 10:09:31 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery 2013_6_28_9_56_7.blg has 198 samples.

6/28/2013 10:09:31 AM -- Creating test report ...

Server 5 – JS10

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance3992.1	507	789.5206436
Instance3992.2	501	705.450088
Instance3992.3	505	709.1629832
Instance3992.4	509	714.732326
Instance3992.5	501	713.6714988

Database Configuration

Instance3992.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3992.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3992.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3992.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3992.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	9.374	0.979	587.937	3.861	40567.716	32768.000	9.179	0.003	5.791	0.004	232488.415	2.626
Instance3992.2	8.469	0.973	656.181	4.267	40666.751	32768.000	8.879	0.000	6.400	0.000	232485.576	0.000
Instance3992.3	8.477	1.033	663.822	4.282	40607.439	32768.000	9.626	0.004	6.423	0.004	232536.861	2.926
Instance3992.4	8.463	0.967	658.162	4.286	40685.034	32768.000	9.498	0.000	6.429	0.000	232525.297	0.000
Instance3992.5	8.385	0.970	648.892	4.227	40764.509	32768.000	9.539	0.004	6.340	0.004	232522.905	2.909

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3992.1	25.607	262057.114
Instance3992.2	27.495	261980.332
Instance3992.3	26.894	261955.710
Instance3992.4	27.190	262010.791
Instance3992.5	28.445	261901.174

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3992.1	9.374	0.979	613.543	3.861	49811.818	32768.000	9.179	0.003	5.791	0.004	232488.415	2.626
Instance3992.2	8.469	0.973	683.676	4.267	49567.208	32768.000	8.879	0.000	6.400	0.000	232485.576	0.000
Instance3992.3	8.477	1.033	690.716	4.282	49225.809	32768.000	9.626	0.004	6.423	0.004	232536.861	2.926
Instance3992.4	8.463	0.967	685.351	4.286	49465.602	32768.000	9.498	0.000	6.429	0.000	232525.297	0.000
Instance3992.5	8.385	0.970	677.336	4.227	50051.128	32768.000	9.539	0.004	6.340	0.004	232522.905	2.909

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.680	0.000	8.904
Available MBytes	59964.628	59920.000	61134.000
Free System Page Table Entries	33555670.000	33555670.000	33555670.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74782448.327	74764288.000	74862592.000
Pool Paged Bytes	228255472.327	228208640.000	228306944.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:54 AM -- Jetstress testing begins ...
6/18/2013 10:56:54 AM -- Prepare testing begins ...
6/18/2013 10:56:59 AM -- Attaching databases ...
6/18/2013 10:58:21 AM -- Jetstress testing begins ...
6/18/2013 10:58:21 AM -- Prepare testing begins ...
6/18/2013 10:58:26 AM -- Attaching databases ...
6/18/2013 10:58:26 AM -- Prepare testing ends.
6/18/2013 10:58:26 AM -- Dispatching transactions begins ...
6/18/2013 10:58:27 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:58:27 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:58:33 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:58:33 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:58:37 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:58:37 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:58:37 AM -- Attaining prerequisites:
6/18/2013 11:01:19 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213768000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 1:01:20 PM -- Performance logging ends.
6/18/2013 1:01:33 PM -- JetInterop batch transaction stats: 28554, 28934, 28713, 28744 and 28609.
6/18/2013 1:01:33 PM -- Dispatching transactions ends.
6/18/2013 1:01:33 PM -- Shutting down databases ...
6/18/2013 1:01:34 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete)
Instance3992.5 (complete)
6/18/2013 1:01:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.blg has 490 samples.
6/18/2013 1:01:34 PM -- Creating test report ...
6/18/2013 1:01:38 PM -- Instance3992.1 has 9.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 8.6 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 8.5 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 8.7 for I/O Database Reads Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 1:01:38 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 1:01:38 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:38 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.xml has 479 samples queried.
6/18/2013 1:01:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_58_33.html is saved.
6/18/2013 1:01:39 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:39 PM -- Verifying database checksums ...
6/18/2013 1:03:07 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:03:08 PM -- Verifying log checksums ...
6/18/2013 1:03:08 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_3_8.evt is saved.
6/18/2013 1:03:08 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_8.xml is saved.
6/18/2013 1:03:08 PM -- Jetstress testing ends.
6/18/2013 1:10:42 PM -- Jetstress testing begins ...
6/18/2013 1:10:42 PM -- Prepare testing begins ...
6/18/2013 1:10:48 PM -- Attaching databases ...
6/18/2013 1:10:48 PM -- Prepare testing ends.
6/18/2013 1:10:48 PM -- Dispatching transactions begins ...
6/18/2013 1:10:48 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:48 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:54 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:54 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:00 PM -- Performance logging begins (interval: 15000 ms).
```

```
6/18/2013 1:11:00 PM -- Attaining prerequisites:
6/18/2013 1:12:42 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214091000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 3:12:42 PM -- Performance logging ends.
6/18/2013 3:13:44 PM -- JetInterop batch transaction stats: 39666, 39743, 39580, 39429 and 39791.
6/18/2013 3:13:45 PM -- Dispatching transactions ends.
6/18/2013 3:13:45 PM -- Shutting down databases ...
6/18/2013 3:13:46 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and
Instance3992.5 (complete)
6/18/2013 3:13:46 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.blg has 486 samples.
6/18/2013 3:13:46 PM -- Creating test report ...
6/18/2013 3:13:49 PM -- Instance3992.1 has 13.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 11.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:49 PM -- Instance3992.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:49 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:49 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 10 54.xml has 479 samples gueried.
6/18/2013 3:13:49 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_54.html is saved.
6/18/2013 3:13:50 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:50 PM -- Verifying database checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (4% processed) and
C:\DB\DB5 (3% processed)
```

```
6/18/2013 3:23:02 PM -- Verifying log checksums ...
6/18/2013 3:23:02 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 15 23 2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_23_2.evt is saved.
6/18/2013 3:23:02 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_23_2.xml is saved.
6/18/2013 3:23:02 PM -- Jetstress testing ends.
6/18/2013 3:31:10 PM -- Jetstress testing begins ...
6/18/2013 3:31:10 PM -- Prepare testing begins ...
6/18/2013 3:31:15 PM -- Attaching databases ...
6/18/2013 3:31:15 PM -- Prepare testing ends.
6/18/2013 3:31:15 PM -- Dispatching transactions begins ...
6/18/2013 3:31:15 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:15 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:21 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:21 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:26 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:26 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:26 PM -- Attaining prerequisites:
6/18/2013 3:33:07 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212715000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:08 PM -- Performance logging ends.
6/18/2013 6:06:56 PM -- JetInterop batch transaction stats: 49468, 49617, 50081, 49679 and 49649.
6/18/2013 6:06:56 PM -- Dispatching transactions ends.
6/18/2013 6:06:56 PM -- Shutting down databases ...
6/18/2013 6:06:58 PM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete)
Instance3992.5 (complete)
6/18/2013 6:06:58 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.blg has 486 samples.
6/18/2013 6:06:58 PM -- Creating test report ...
6/18/2013 6:07:01 PM -- Instance3992.1 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
```

```
6/18/2013 6:07:01 PM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 11.7 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 11.6 for I/O Database Reads Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:07:01 PM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:07:01 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:07:01 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_21.xml has 479 samples queried.
6/18/2013 6:07:01 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 21.html is saved.
6/18/2013 6:07:02 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:07:02 PM -- Verifying database checksums ...
6/18/2013 11:02:30 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 11:02:30 PM -- Performance logging ends.
6/18/2013 11:02:30 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 18 18 7 1.blg has 590 samples.
6/18/2013 11:02:34 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_7_1.html is saved.
6/18/2013 11:02:34 PM -- Verifying log checksums ...
6/18/2013 11:02:35 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (11 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (10
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_2_35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_2_35.evt is saved.
6/18/2013 11:02:35 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_23_2_35.xml is saved.
6/18/2013 11:02:35 PM -- Jetstress testing ends.
6/18/2013 11:31:15 PM -- Jetstress testing begins ...
6/18/2013 11:31:15 PM -- Prepare testing begins ...
6/18/2013 11:31:21 PM -- Attaching databases ...
6/18/2013 11:31:21 PM -- Prepare testing ends.
6/18/2013 11:31:21 PM -- Dispatching transactions begins ...
6/18/2013 11:31:21 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
```

```
6/18/2013 11:31:21 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:27 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:27 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:31 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:31 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:31 PM -- Attaining prerequisites:
6/18/2013 11:33:11 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211941000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:11 PM -- Performance logging ends.
6/20/2013 9:25:16 AM -- JetInterop batch transaction stats: 639917, 640064, 638230, 638667 and 640278.
6/20/2013 9:25:16 AM -- Dispatching transactions ends.
6/20/2013 9:25:16 AM -- Shutting down databases ...
6/20/2013 9:25:17 AM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete)
Instance3992.5 (complete)
6/20/2013 9:25:17 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_27.blg has 5757 samples.
6/20/2013 9:25:17 AM -- Creating test report ...
6/20/2013 9:25:43 AM -- Instance3992.1 has 13.3 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 11.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 11.8 for I/O Database Reads Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:43 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:43 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:43 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
```

6/20/2013 9:25:43 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 27.xml has 5750 samples queried.

```
6/20/2013 9:25:43 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_27.html is saved.
6/20/2013 9:25:44 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:44 AM -- Verifying database checksums ...
6/20/2013 2:30:42 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/20/2013 2:30:42 PM -- Performance logging ends.
6/20/2013 2:30:42 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_43.blg has 609 samples.
6/20/2013 2:30:46 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_43.html is saved.
6/20/2013 2:30:46 PM -- Verifying log checksums ...
6/20/2013 2:30:47 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_30_47.evt is saved.
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_30_47.evt is saved.
6/20/2013 2:30:47 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 20 14 30 47.xml is saved.
6/20/2013 2:30:47 PM -- Jetstress testing ends.
6/20/2013 3:52:21 PM -- Jetstress testing begins ...
6/20/2013 3:52:21 PM -- Prepare testing begins ...
6/20/2013 3:52:27 PM -- Attaching databases ...
6/20/2013 3:52:27 PM -- Prepare testing ends.
6/20/2013 3:52:35 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:35 PM -- Backing up databases ...
6/20/2013 9:51:07 PM -- Performance logging ends.
6/20/2013 9:51:07 PM -- Instance3992.1 (100% processed), Instance3992.2 (100% processed), Instance3992.3 (100% processed), Instance3992.4
(100% processed) and Instance3992.5 (100% processed)
6/20/2013 9:51:07 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_27.blg has 716 samples.
6/20/2013 9:51:07 PM -- Creating test report ...
6/20/2013 9:51:10 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_27.html is saved.
6/20/2013 9:51:10 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_51_10.evt is saved.
6/20/2013 9:51:10 PM -- C:\Program Files\Exchange Jetstress\System 2013 6 20 21 51 10.evt is saved.
6/20/2013 9:51:10 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_51_10.xml is saved.
6/20/2013 9:51:10 PM -- Jetstress testing ends.
6/21/2013 8:32:35 AM -- Jetstress testing begins ...
6/21/2013 8:32:35 AM -- Prepare testing begins ...
6/21/2013 8:32:41 AM -- Attaching databases ...
```

```
6/21/2013 8:32:41 AM -- Prepare testing ends.
6/21/2013 8:32:41 AM -- Dispatching transactions begins ...
6/21/2013 8:32:41 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/21/2013 8:32:41 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:47 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:47 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:50 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:50 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:50 AM -- Generating log files ...
6/21/2013 9:38:49 AM -- C:\DB\DB1 (101.4% generated), C:\DB\DB2 (100.2% generated), C:\DB\DB3 (101.0% generated), C:\DB\DB4 (101.8%
generated) and C:\DB\DB5 (100.2% generated)
6/21/2013 9:38:49 AM -- Performance logging ends.
6/21/2013 9:38:49 AM -- JetInterop batch transaction stats: 21800, 21614, 21951, 21658 and 21560.
6/21/2013 9:38:49 AM -- Dispatching transactions ends.
6/21/2013 9:38:49 AM -- Shutting down databases ...
6/21/2013 9:38:50 AM -- Instance3992.1 (complete), Instance3992.2 (complete), Instance3992.3 (complete), Instance3992.4 (complete) and
Instance3992.5 (complete)
6/21/2013 9:38:50 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_47.blg has 263 samples.
6/21/2013 9:38:50 AM -- Creating test report ...
6/21/2013 9:38:51 AM -- Instance3992.1 has 15.3 for I/O Database Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.2 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.3 has 13.9 for I/O Database Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.4 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.5 has 14.0 for I/O Database Reads Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:38:51 AM -- Instance3992.5 has 0.9 for I/O Log Reads Average Latency.
```

6/21/2013 9:38:51 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.

6/21/2013 9:38:51 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.

6/21/2013 9:38:51 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 47.xml has 262 samples queried.

6/21/2013 9:38:51 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 47.html is saved.

6/28/2013 9:56:28 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:56:28 AM -- Recovering databases ...

6/28/2013 10:09:38 AM -- Performance logging ends.

6/28/2013 10:09:38 AM -- Instance3992.1 (789.5206436), Instance3992.2 (705.450088), Instance3992.3 (709.1629832), Instance3992.4

(714.732326) and Instance3992.5 (713.6714988)

6/28/2013 10:09:39 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery 2013 6 28 9 56 25.blg has 196 samples.

6/28/2013 10:09:39 AM -- Creating test report ...

Server 6 – JS11

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance304.1	510	744.1702808
Instance304.2	501	732.5011816
Instance304.3	502	735.94887
Instance304.4	509	743.3746604
Instance304.5	506	746.0267284

Database Configuration

	3
Instance304.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance304.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance304.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance304.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance304.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance304.1	8.783	0.893	650.357	4.114	40606.830	32768.000	9.249	0.000	6.171	0.000	232471.287	0.000
Instance304.2	8.793	0.982	641.374	4.108	40867.121	32768.000	9.288	0.000	6.162	0.000	232522.925	0.000
Instance304.3	8.778	0.877	649.050	4.093	41018.865	32586.961	8.604	0.000	6.140	0.000	231175.052	0.000
Instance304.4	8.810	0.892	638.391	4.114	40804.756	32768.000	9.489	0.000	6.171	0.000	232527.944	0.000
Instance304.5	8.884	0.987	633.812	4.075	40719.616	32768.000	9.063	0.000	6.113	0.000	232514.145	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance304.1	25.740	261875.056
Instance304.2	25.799	261849.977
Instance304.3	26.358	262017.403
Instance304.4	26.538	261970.279
Instance304.5	26.359	261991.055

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance304.1	8.783	0.893	676.097	4.114	49030.714	32768.000	9.249	0.000	6.171	0.000	232471.287	0.000
Instance304.2	8.793	0.982	667.172	4.108	49412.240	32768.000	9.288	0.000	6.162	0.000	232522.925	0.000
Instance304.3	8.778	0.877	675.407	4.093	49643.282	32586.961	8.604	0.000	6.140	0.000	231175.052	0.000
Instance304.4	8.810	0.892	664.929	4.114	49631.683	32768.000	9.489	0.000	6.171	0.000	232527.944	0.000
Instance304.5	8.884	0.987	660.171	4.075	49554.317	32768.000	9.063	0.000	6.113	0.000	232514.145	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.851	0.000	9.316
Available MBytes	59974.027	59801.000	61150.000
Free System Page Table Entries	33555155.627	33555093.000	33555157.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74230346.724	74219520.000	74309632.000
Pool Paged Bytes	231009927.611	230948864.000	231149568.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:56 AM -- Jetstress testing begins ...
6/18/2013 10:56:56 AM -- Prepare testing begins ...
6/18/2013 10:57:02 AM -- Attaching databases ...
6/18/2013 10:57:02 AM -- Prepare testing ends.
6/18/2013 10:57:02 AM -- Dispatching transactions begins ...
6/18/2013 10:57:02 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:02 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:08 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:08 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:12 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:12 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:12 AM -- Attaining prerequisites:
6/18/2013 10:59:40 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208623000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 12:59:41 PM -- Performance logging ends.
6/18/2013 1:01:35 PM -- JetInterop batch transaction stats: 28514, 28772, 28603, 28860 and 28659.
6/18/2013 1:01:36 PM -- Dispatching transactions ends.
6/18/2013 1:01:36 PM -- Shutting down databases ...
6/18/2013 1:01:37 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and
Instance304.5 (complete)
6/18/2013 1:01:37 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 8.blg has 489 samples.
6/18/2013 1:01:37 PM -- Creating test report ...
6/18/2013 1:01:40 PM -- Instance304.1 has 9.0 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 8.9 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 9.0 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:40 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:40 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:40 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:40 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 8.xml has 479 samples queried.
6/18/2013 1:01:41 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 8.html is saved.
6/18/2013 1:01:42 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:42 PM -- Verifying database checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:03:12 PM -- Verifying log checksums ...
6/18/2013 1:03:12 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_3_12.evt is saved.
6/18/2013 1:03:12 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_12.xml is saved.
6/18/2013 1:03:12 PM -- Jetstress testing ends.
6/18/2013 1:10:46 PM -- Jetstress testing begins ...
6/18/2013 1:10:46 PM -- Prepare testing begins ...
6/18/2013 1:10:51 PM -- Attaching databases ...
6/18/2013 1:10:51 PM -- Prepare testing ends.
6/18/2013 1:10:51 PM -- Dispatching transactions begins ...
6/18/2013 1:10:51 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:51 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:10:57 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:10:57 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:02 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:02 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:02 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212584000.0 (lower bound: 1207960000.0, upper
bound: none)
```

6/18/2013 3:12:51 PM -- Performance logging ends.

```
6/18/2013 3:13:38 PM -- JetInterop batch transaction stats: 38646, 38442, 38663, 38712 and 38705.
6/18/2013 3:13:38 PM -- Dispatching transactions ends.
6/18/2013 3:13:38 PM -- Shutting down databases ...
6/18/2013 3:13:39 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and
Instance304.5 (complete)
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.blg has 486 samples.
6/18/2013 3:13:39 PM -- Creating test report ...
6/18/2013 3:13:43 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:43 PM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.xml has 478 samples queried.
6/18/2013 3:13:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_10_57.html is saved.
6/18/2013 3:13:44 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:44 PM -- Verifying database checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (3% processed), C:\DB\DB2 (3% processed), C:\DB\DB3 (3% processed), C:\DB\DB4 (3% processed) and
C:\DB\DB5 (3% processed)
6/18/2013 3:22:55 PM -- Verifying log checksums ...
6/18/2013 3:22:55 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
```

```
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_22_55.evt is saved.
6/18/2013 3:22:55 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_22_55.xml is saved.
6/18/2013 3:22:55 PM -- Jetstress testing ends.
6/18/2013 3:31:03 PM -- Jetstress testing begins ...
6/18/2013 3:31:03 PM -- Prepare testing begins ...
6/18/2013 3:31:09 PM -- Attaching databases ...
6/18/2013 3:31:09 PM -- Prepare testing ends.
6/18/2013 3:31:09 PM -- Dispatching transactions begins ...
6/18/2013 3:31:09 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:09 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:15 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:15 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:20 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:20 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:20 PM -- Attaining prerequisites:
6/18/2013 3:33:00 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210692000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:33:01 PM -- Performance logging ends.
6/18/2013 6:06:46 PM -- JetInterop batch transaction stats: 47895, 47739, 48183, 48056 and 48255.
6/18/2013 6:06:46 PM -- Dispatching transactions ends.
6/18/2013 6:06:46 PM -- Shutting down databases ...
6/18/2013 6:06:47 PM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete)
Instance304.5 (complete)
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.blg has 485 samples.
6/18/2013 6:06:47 PM -- Creating test report ...
6/18/2013 6:06:50 PM -- Instance304.1 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 12.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Writes Average Latency.
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6/18/2013 6:06:50 PM -- Instance304.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:50 PM -- Instance304.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:50 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 15.xml has 478 samples queried.
6/18/2013 6:06:51 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_15.html is saved.
6/18/2013 6:06:52 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:52 PM -- Verifying database checksums ...
6/18/2013 10:48:40 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed), C:\DB4 (100% proce
processed) and C:\DB\DB5 (100% processed)
6/18/2013 10:48:40 PM -- Performance logging ends.
6/18/2013 10:48:40 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.blg has 563 samples.
6/18/2013 10:48:43 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_51.html is saved.
6/18/2013 10:48:43 PM -- Verifying log checksums ...
6/18/2013 10:48:44 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 22 48 44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_48_44.evt is saved.
6/18/2013 10:48:44 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_48_44.xml is saved.
6/18/2013 10:48:44 PM -- Jetstress testing ends.
6/18/2013 11:31:18 PM -- Jetstress testing begins ...
6/18/2013 11:31:18 PM -- Prepare testing begins ...
6/18/2013 11:31:24 PM -- Attaching databases ...
6/18/2013 11:31:24 PM -- Prepare testing ends.
6/18/2013 11:31:24 PM -- Dispatching transactions begins ...
6/18/2013 11:31:24 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:24 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:30 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:30 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
```

6/18/2013 11:31:34 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/18/2013 11:31:34 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:34 PM -- Attaining prerequisites:
6/18/2013 11:33:22 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208087000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:22 PM -- Performance logging ends.
6/20/2013 9:25:19 AM -- JetInterop batch transaction stats: 608115, 608020, 607589, 607483 and 607460.
6/20/2013 9:25:19 AM -- Dispatching transactions ends.
6/20/2013 9:25:19 AM -- Shutting down databases ...
6/20/2013 9:25:20 AM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and
Instance304.5 (complete)
6/20/2013 9:25:20 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.blg has 5758 samples.
6/20/2013 9:25:20 AM -- Creating test report ...
6/20/2013 9:25:48 AM -- Instance304.1 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 12.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 12.7 for I/O Database Reads Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:48 AM -- Instance304.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:48 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:48 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:48 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.xml has 5750 samples gueried.
6/20/2013 9:25:48 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_30.html is saved.
6/20/2013 9:25:49 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:49 AM -- Verifying database checksums ...
```

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6/20/2013 2:17:54 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
and C:\DB\DB5 (100% processed)
6/20/2013 2:17:54 PM -- Performance logging ends.
6/20/2013 2:17:54 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 48.blg has 583 samples.
6/20/2013 2:17:58 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_48.html is saved.
6/20/2013 2:17:58 PM -- Verifying log checksums ...
6/20/2013 2:18:00 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 18 0.evt is saved.
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_18_0.evt is saved.
6/20/2013 2:18:00 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_18_0.xml is saved.
6/20/2013 2:18:00 PM -- Jetstress testing ends.
6/20/2013 3:52:24 PM -- Jetstress testing begins ...
6/20/2013 3:52:24 PM -- Prepare testing begins ...
6/20/2013 3:52:30 PM -- Attaching databases ...
6/20/2013 3:52:30 PM -- Prepare testing ends.
6/20/2013 3:52:38 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:38 PM -- Backing up databases ...
6/20/2013 9:41:54 PM -- Performance logging ends.
6/20/2013 9:41:54 PM -- Instance304.1 (100% processed), Instance304.2 (100% processed), Instance304.3 (100% processed), Instance304.4
(100% processed) and Instance304.5 (100% processed)
6/20/2013 9:41:54 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_30.blg has 697 samples.
6/20/2013 9:41:54 PM -- Creating test report ...
6/20/2013 9:41:57 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 30.html is saved.
6/20/2013 9:41:57 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 21 41 57.evt is saved.
6/20/2013 9:41:57 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_41_57.evt is saved.
6/20/2013 9:41:57 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_41_57.xml is saved.
6/20/2013 9:41:57 PM -- Jetstress testing ends.
6/21/2013 8:32:32 AM -- Jetstress testing begins ...
6/21/2013 8:32:32 AM -- Prepare testing begins ...
6/21/2013 8:32:38 AM -- Attaching databases ...
6/21/2013 8:32:38 AM -- Prepare testing ends.
6/21/2013 8:32:38 AM -- Dispatching transactions begins ...
6/21/2013 8:32:38 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
```

```
6/21/2013 8:32:38 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:44 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:44 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:47 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:47 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:47 AM -- Generating log files ...
6/21/2013 9:43:07 AM -- C:\DB\DB1 (102.0% generated), C:\DB\DB2 (100.2% generated), C:\DB\DB3 (100.4% generated), C:\DB\DB4 (101.8%
generated) and C:\DB\DB5 (101.2% generated)
6/21/2013 9:43:07 AM -- Performance logging ends.
6/21/2013 9:43:07 AM -- JetInterop batch transaction stats: 21992, 21694, 21961, 21950 and 21818.
6/21/2013 9:43:07 AM -- Dispatching transactions ends.
6/21/2013 9:43:07 AM -- Shutting down databases ...
6/21/2013 9:43:08 AM -- Instance304.1 (complete), Instance304.2 (complete), Instance304.3 (complete), Instance304.4 (complete) and
Instance304.5 (complete)
6/21/2013 9:43:08 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 44.blg has 280 samples.
6/21/2013 9:43:08 AM -- Creating test report ...
6/21/2013 9:43:10 AM -- Instance304.1 has 15.0 for I/O Database Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:43:10 AM -- Instance304.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.2 has 14.9 for I/O Database Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:43:10 AM -- Instance304.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.3 has 14.9 for I/O Database Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:43:10 AM -- Instance304.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.4 has 15.1 for I/O Database Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:43:10 AM -- Instance304.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.5 has 15.2 for I/O Database Reads Average Latency.
6/21/2013 9:43:10 AM -- Instance304.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:43:10 AM -- Instance304.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:43:10 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:43:10 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:43:10 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 44.xml has 279 samples gueried.
```

6/21/2013 9:43:10 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_44.html is saved.

6/28/2013 9:56:36 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:56:36 AM -- Recovering databases ...

6/28/2013 10:09:02 AM -- Performance logging ends.

6/28/2013 10:09:02 AM -- Instance304.1 (744.1702808), Instance304.2 (732.5011816), Instance304.3 (735.94887), Instance304.4 (743.3746604) and Instance304.5 (746.0267284)

6/28/2013 10:09:03 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_56_33.blg has 185 samples.

6/28/2013 10:09:03 AM -- Creating test report ...

Server 7 – JS12

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance3984.1	502	756.6398505
Instance3984.2	501	748.6835955
Instance3984.3	501	761.4136035
Instance3984.4	511	762.739646
Instance3984.5	502	761.148395

Database Configuration

Database Connigation								
Instance3984.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb							
Instance3984.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb							
Instance3984.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb							
Instance3984.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb							
Instance3984.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb							

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3984.1	9.033	0.895	633.546	3.990	40839.505	32768.000	8.854	0.004	5.991	0.017	232486.783	2.738
Instance3984.2	9.073	0.869	630.155	4.025	40834.361	32768.000	8.245	0.003	6.044	0.016	232547.102	2.768
Instance3984.3	9.091	0.914	629.805	3.957	41040.139	32768.000	8.532	0.002	5.935	0.004	232459.839	2.723
Instance3984.4	9.019	0.889	636.500	4.020	41098.613	32768.000	8.832	0.000	6.030	0.000	232511.096	0.000
Instance3984.5	9.280	0.886	611.512	3.965	40886.278	32768.000	8.652	0.002	5.947	0.004	232520.247	2.723

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3984.1	25.590	261983.395
Instance3984.2	26.126	262048.231
Instance3984.3	26.231	262050.325
Instance3984.4	25.652	261983.547
Instance3984.5	25.190	261970.329

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3984.1	9.033	0.895	659.136	3.990	49425.167	32768.000	8.854	0.004	5.991	0.017	232486.783	2.738
Instance3984.2	9.073	0.869	656.282	4.025	49640.718	32768.000	8.245	0.003	6.044	0.016	232547.102	2.768
Instance3984.3	9.091	0.914	656.036	3.957	49877.098	32768.000	8.532	0.002	5.935	0.004	232459.839	2.723
Instance3984.4	9.019	0.889	662.152	4.020	49655.883	32768.000	8.832	0.000	6.030	0.000	232511.096	0.000
Instance3984.5	9.280	0.886	636.702	3.965	49633.003	32768.000	8.652	0.002	5.947	0.004	232520.247	2.723

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.677	0.000	7.791
Available MBytes	59931.714	59757.000	61097.000
Free System Page Table Entries	33555157.164	33555094.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	75465029.079	75460608.000	75497472.000
Pool Paged Bytes	231568551.958	231530496.000	231755776.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:56:58 AM -- Jetstress testing begins ...
6/18/2013 10:56:58 AM -- Prepare testing begins ...
6/18/2013 10:57:04 AM -- Attaching databases ...
6/18/2013 10:57:04 AM -- Prepare testing ends.
6/18/2013 10:57:04 AM -- Dispatching transactions begins ...
6/18/2013 10:57:04 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:04 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:10 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:10 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:15 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:15 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:15 AM -- Attaining prerequisites:
6/18/2013 10:59:55 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211769000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 12:59:56 PM -- Performance logging ends.
6/18/2013 1:01:38 PM -- JetInterop batch transaction stats: 27473, 27301, 27492, 27469 and 27372.
6/18/2013 1:01:38 PM -- Dispatching transactions ends.
6/18/2013 1:01:38 PM -- Shutting down databases ...
6/18/2013 1:01:39 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and
Instance3984.5 (complete)
6/18/2013 1:01:39 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 10.blg has 489 samples.
6/18/2013 1:01:39 PM -- Creating test report ...
6/18/2013 1:01:43 PM -- Instance3984.1 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 9.2 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 9.4 for I/O Database Reads Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:43 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:43 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:43 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:43 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_10_57_10.xml has 478 samples gueried.
6/18/2013 1:01:44 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 10.html is saved.
6/18/2013 1:01:45 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:45 PM -- Verifying database checksums ...
6/18/2013 1:03:15 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:03:16 PM -- Verifying log checksums ...
6/18/2013 1:03:16 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_3_16.evt is saved.
6/18/2013 1:03:16 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_16.xml is saved.
6/18/2013 1:03:16 PM -- Jetstress testing ends.
6/18/2013 1:10:48 PM -- Jetstress testing begins ...
6/18/2013 1:10:48 PM -- Prepare testing begins ...
6/18/2013 1:10:54 PM -- Attaching databases ...
6/18/2013 1:10:54 PM -- Prepare testing ends.
6/18/2013 1:10:54 PM -- Dispatching transactions begins ...
6/18/2013 1:10:54 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:54 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:00 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:00 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:05 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:05 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:05 PM -- Attaining prerequisites:
6/18/2013 1:12:51 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1214104000.0 (lower bound: 1207960000.0, upper
bound: none)
```

processed) and C:\DB\DB5 (0 log(s) processed)

```
6/18/2013 3:12:51 PM -- Performance logging ends.
6/18/2013 3:13:34 PM -- JetInterop batch transaction stats: 36569, 36311, 36550, 36376 and 36492.
6/18/2013 3:13:35 PM -- Dispatching transactions ends.
6/18/2013 3:13:35 PM -- Shutting down databases ...
6/18/2013 3:13:36 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and
Instance3984.5 (complete)
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.blg has 486 samples.
6/18/2013 3:13:36 PM -- Creating test report ...
6/18/2013 3:13:39 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:39 PM -- Instance 3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:39 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:39 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:39 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.xml has 478 samples queried.
6/18/2013 3:13:39 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_0.html is saved.
6/18/2013 3:13:40 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:40 PM -- Verifying database checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and
C:\DB\DB5 (1% processed)
6/18/2013 3:19:38 PM -- Verifying log checksums ...
6/18/2013 3:19:38 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
```

```
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_38.evt is saved.
6/18/2013 3:19:38 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_38.xml is saved.
6/18/2013 3:19:38 PM -- Jetstress testing ends.
6/18/2013 3:30:58 PM -- Jetstress testing begins ...
6/18/2013 3:30:58 PM -- Prepare testing begins ...
6/18/2013 3:31:04 PM -- Attaching databases ...
6/18/2013 3:31:04 PM -- Prepare testing ends.
6/18/2013 3:31:04 PM -- Dispatching transactions begins ...
6/18/2013 3:31:04 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:31:04 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:10 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:10 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:15 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:15 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:15 PM -- Attaining prerequisites:
6/18/2013 3:32:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1208979000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:32:59 PM -- Performance logging ends.
6/18/2013 6:06:42 PM -- JetInterop batch transaction stats: 44967, 45509, 45269, 45388 and 45393.
6/18/2013 6:06:42 PM -- Dispatching transactions ends.
6/18/2013 6:06:42 PM -- Shutting down databases ...
6/18/2013 6:06:44 PM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete)
Instance3984.5 (complete)
6/18/2013 6:06:44 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.blg has 486 samples.
6/18/2013 6:06:44 PM -- Creating test report ...
6/18/2013 6:06:47 PM -- Instance3984.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 13.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
```

```
6/18/2013 6:06:47 PM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 12.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 13.2 for I/O Database Reads Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 6:06:47 PM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 6:06:47 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:47 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 31 10.xml has 479 samples queried.
6/18/2013 6:06:47 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_10.html is saved.
6/18/2013 6:06:48 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:48 PM -- Verifying database checksums ...
6/18/2013 10:55:52 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed), C:\DB4 (100% pr
processed) and C:\DB\DB5 (100% processed)
6/18/2013 10:55:52 PM -- Performance logging ends.
6/18/2013 10:55:52 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.blg has 577 samples.
6/18/2013 10:55:56 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_47.html is saved.
6/18/2013 10:55:56 PM -- Verifying log checksums ...
6/18/2013 10:55:57 PM -- C:\DB\DB1 (13 log(s) processed), C:\DB\DB2 (13 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (11
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 22 55 57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_55_57.evt is saved.
6/18/2013 10:55:57 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_55_57.xml is saved.
6/18/2013 10:55:57 PM -- Jetstress testing ends.
6/18/2013 11:31:21 PM -- Jetstress testing begins ...
6/18/2013 11:31:21 PM -- Prepare testing begins ...
6/18/2013 11:31:27 PM -- Attaching databases ...
6/18/2013 11:31:27 PM -- Prepare testing ends.
6/18/2013 11:31:27 PM -- Dispatching transactions begins ...
6/18/2013 11:31:27 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:27 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:33 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:33 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
```

6/18/2013 11:31:37 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

```
6/18/2013 11:31:37 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:37 PM -- Attaining prerequisites:
6/18/2013 11:33:33 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1213645000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:34 PM -- Performance logging ends.
6/20/2013 9:25:22 AM -- JetInterop batch transaction stats: 570992, 569982, 569558, 571133 and 570524.
6/20/2013 9:25:22 AM -- Dispatching transactions ends.
6/20/2013 9:25:22 AM -- Shutting down databases ...
6/20/2013 9:25:24 AM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete) and
Instance3984.5 (complete)
6/20/2013 9:25:24 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.blg has 5758 samples.
6/20/2013 9:25:24 AM -- Creating test report ...
6/20/2013 9:25:55 AM -- Instance3984.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 13.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 13.1 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 13.4 for I/O Database Reads Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:25:55 AM -- Instance3984.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:25:55 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:25:55 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:25:55 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.xml has 5750 samples gueried.
6/20/2013 9:25:55 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_33.html is saved.
6/20/2013 9:25:56 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:25:56 AM -- Verifying database checksums ...
```

```
6/20/2013 2:25:38 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/20/2013 2:25:38 PM -- Performance logging ends.
6/20/2013 2:25:38 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 20 9 25 55.blg has 599 samples.
6/20/2013 2:25:42 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_25_55.html is saved.
6/20/2013 2:25:42 PM -- Verifying log checksums ...
6/20/2013 2:25:42 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (11
log(s) processed) and C:\DB\DB5 (11 log(s) processed)
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 25 43.evt is saved.
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_25_43.evt is saved.
6/20/2013 2:25:43 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_25_43.xml is saved.
6/20/2013 2:25:43 PM -- Jetstress testing ends.
6/20/2013 3:52:26 PM -- Jetstress testing begins ...
6/20/2013 3:52:27 PM -- Prepare testing begins ...
6/20/2013 3:52:32 PM -- Attaching databases ...
6/20/2013 3:52:32 PM -- Prepare testing ends.
6/20/2013 3:52:41 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:41 PM -- Backing up databases ...
6/20/2013 9:42:42 PM -- Performance logging ends.
6/20/2013 9:42:42 PM -- Instance3984.1 (100% processed), Instance3984.2 (100% processed), Instance3984.3 (100% processed),
Instance3984.4 (100% processed) and Instance3984.5 (100% processed)
6/20/2013 9:42:42 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_32.blg has 699 samples.
6/20/2013 9:42:42 PM -- Creating test report ...
6/20/2013 9:42:45 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_32.html is saved.
6/20/2013 9:42:45 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_42_45.evt is saved.
6/20/2013 9:42:45 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_42_45.evt is saved.
6/20/2013 9:42:45 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_42_45.xml is saved.
6/20/2013 9:42:45 PM -- Jetstress testing ends.
6/21/2013 8:32:28 AM -- Jetstress testing begins ...
6/21/2013 8:32:28 AM -- Prepare testing begins ...
6/21/2013 8:32:34 AM -- Attaching databases ...
6/21/2013 8:32:34 AM -- Prepare testing ends.
6/21/2013 8:32:34 AM -- Dispatching transactions begins ...
6/21/2013 8:32:34 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
```

```
6/21/2013 8:32:34 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:40 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:40 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:45 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:45 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:45 AM -- Generating log files ...
6/21/2013 9:44:59 AM -- C:\DB\DB1 (100.4% generated), C:\DB\DB2 (100.2% generated), C:\DB\DB3 (100.2% generated), C:\DB\DB4 (102.2%
generated) and C:\DB\DB5 (100.4% generated)
6/21/2013 9:44:59 AM -- Performance logging ends.
6/21/2013 9:44:59 AM -- JetInterop batch transaction stats: 21550, 21524, 21665, 21920 and 21491.
6/21/2013 9:45:00 AM -- Dispatching transactions ends.
6/21/2013 9:45:00 AM -- Shutting down databases ...
6/21/2013 9:45:01 AM -- Instance3984.1 (complete), Instance3984.2 (complete), Instance3984.3 (complete), Instance3984.4 (complete)
Instance3984.5 (complete)
6/21/2013 9:45:01 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_40.blg has 288 samples.
6/21/2013 9:45:01 AM -- Creating test report ...
6/21/2013 9:45:02 AM -- Instance3984.1 has 15.5 for I/O Database Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.2 has 15.6 for I/O Database Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.3 has 15.7 for I/O Database Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.4 has 15.7 for I/O Database Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.5 has 16.0 for I/O Database Reads Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:02 AM -- Instance3984.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:02 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:45:02 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:45:02 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 40.xml has 287 samples gueried.
```

6/21/2013 9:45:02 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_40.html is saved.

6/28/2013 9:56:46 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:56:46 AM -- Recovering databases ...

6/28/2013 10:09:29 AM -- Performance logging ends.

 $6/28/2013\ 10:09:29\ AM\ --\ Instance 3984.1\ (756.6398505),\ Instance 3984.2\ (748.6835955),\ Instance 3984.3\ (761.4136035),\ Instance 3984.4\ (748.6835955),\ Instance 3984.3\ (761.4136035),\ Instance 3984.4\ (761.4136035),\ In$

(762.739646) and Instance3984.5 (761.148395)

6/28/2013 10:09:30 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_56_43.blg has 189 samples.

6/28/2013 10:09:30 AM -- Creating test report ...

Server 8 – JS13

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance376.1	508	760.8783092
Instance376.2	505	749.4744168
Instance376.3	501	743.3746604
Instance376.4	510	728.2578728
Instance376.5	514	736.4792836

Database Configuration

Database Co	inigaration.
Instance376.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance376.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance376.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance376.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance376.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	8.700	0.996	631.461	4.016	40960.498	32593.702	8.406	0.002	6.030	0.016	231270.565	2.723
Instance376.2	8.699	1.013	650.860	4.045	41079.458	32590.876	8.668	0.000	6.068	0.000	231254.203	0.000
Instance376.3	8.899	0.992	645.777	4.041	40878.635	32768.000	9.474	0.000	6.061	0.000	232493.978	0.000
Instance376.4	8.798	0.998	648.669	4.206	40708.595	32768.000	8.681	0.000	6.309	0.000	232542.179	0.000
Instance376.5	8.512	0.975	667.292	4.198	40865.910	32768.000	8.795	0.003	6.303	0.016	232492.139	2.813

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance376.1	28.829	261977.431
Instance376.2	26.951	262028.734
Instance376.3	24.972	261945.604
Instance376.4	25.449	261956.269
Instance376.5	28.168	262057.311

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance376.1	8.700	0.996	660.290	4.016	50610.509	32593.702	8.406	0.002	6.030	0.016	231270.565	2.723
Instance376.2	8.699	1.013	677.811	4.045	49864.713	32590.876	8.668	0.000	6.068	0.000	231254.203	0.000
Instance376.3	8.899	0.992	670.749	4.041	49109.106	32768.000	9.474	0.000	6.061	0.000	232493.978	0.000
Instance376.4	8.798	0.998	674.117	4.206	49060.912	32768.000	8.681	0.000	6.309	0.000	232542.179	0.000
Instance376.5	8.512	0.975	695.460	4.198	49824.645	32768.000	8.795	0.003	6.303	0.016	232492.139	2.813

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.725	0.000	8.759
Available MBytes	59949.577	59777.000	61111.000
Free System Page Table Entries	33555157.185	33555096.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	77525793.862	77516800.000	77578240.000
Pool Paged Bytes	232440631.534	232407040.000	232517632.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 1:10:51 PM -- Jetstress testing begins ...
6/18/2013 1:10:51 PM -- Prepare testing begins ...
6/18/2013 1:10:56 PM -- Attaching databases ...
6/18/2013 1:10:56 PM -- Prepare testing ends.
6/18/2013 1:10:56 PM -- Dispatching transactions begins ...
6/18/2013 1:10:56 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:10:56 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:02 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:02 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:08 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:08 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:08 PM -- Attaining prerequisites:
6/18/2013 1:12:58 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1212314000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 3:12:59 PM -- Performance logging ends.
6/18/2013 3:13:31 PM -- JetInterop batch transaction stats: 38705, 38814, 39021, 38453 and 38697.
6/18/2013 3:13:31 PM -- Dispatching transactions ends.
6/18/2013 3:13:31 PM -- Shutting down databases ...
6/18/2013 3:13:32 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete)
Instance376.5 (complete)
6/18/2013 3:13:32 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 11 2.blg has 486 samples.
6/18/2013 3:13:32 PM -- Creating test report ...
6/18/2013 3:13:35 PM -- Instance376.1 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
```

```
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:35 PM -- Instance376.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:35 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:35 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:35 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_2.xml has 478 samples queried.
6/18/2013 3:13:36 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 13 11 2.html is saved.
6/18/2013 3:13:37 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:37 PM -- Verifying database checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (1% processed), C:\DB\DB2 (1% processed), C:\DB\DB3 (1% processed), C:\DB\DB4 (2% processed) and
C:\DB\DB5 (2% processed)
6/18/2013 3:19:48 PM -- Verifying log checksums ...
6/18/2013 3:19:48 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_19_48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_19_48.evt is saved.
6/18/2013 3:19:48 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_19_48.xml is saved.
6/18/2013 3:19:48 PM -- Jetstress testing ends.
6/18/2013 3:30:54 PM -- Jetstress testing begins ...
6/18/2013 3:30:54 PM -- Prepare testing begins ...
6/18/2013 3:30:59 PM -- Attaching databases ...
6/18/2013 3:30:59 PM -- Prepare testing ends.
6/18/2013 3:30:59 PM -- Dispatching transactions begins ...
6/18/2013 3:30:59 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:59 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:31:05 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:31:05 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:10 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:10 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:10 PM -- Attaining prerequisites:
6/18/2013 3:32:38 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1217004000.0 (lower bound: 1207960000.0, upper
bound: none)
```

```
6/18/2013 5:32:38 PM -- Performance logging ends.
6/18/2013 6:06:37 PM -- JetInterop batch transaction stats: 48261, 47876, 48075, 48535 and 47826.
6/18/2013 6:06:37 PM -- Dispatching transactions ends.
6/18/2013 6:06:37 PM -- Shutting down databases ...
6/18/2013 6:06:38 PM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete)
Instance376.5 (complete)
6/18/2013 6:06:38 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.blg has 485 samples.
6/18/2013 6:06:38 PM -- Creating test report ...
6/18/2013 6:06:42 PM -- Instance376.1 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 12.3 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 12.4 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 11.9 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 12.0 for I/O Database Reads Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:42 PM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:42 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:42 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.xml has 479 samples queried.
6/18/2013 6:06:42 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_31_5.html is saved.
6/18/2013 6:06:43 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:43 PM -- Verifying database checksums ...
6/18/2013 10:49:17 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 10:49:17 PM -- Performance logging ends.
6/18/2013 10:49:17 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_42.blg has 564 samples.
```

6/18/2013 10:49:21 PM -- C:\Program Files\Exchange Jetstress\DBChecksum 2013 6 18 18 6 42.html is saved.

```
6/18/2013 10:49:21 PM -- Verifying log checksums ...
6/18/2013 10:49:32 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 18 22 49 32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_22_49_32.evt is saved.
6/18/2013 10:49:32 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_22_49_32.xml is saved.
6/18/2013 10:49:32 PM -- Jetstress testing ends.
6/18/2013 11:31:24 PM -- Jetstress testing begins ...
6/18/2013 11:31:24 PM -- Prepare testing begins ...
6/18/2013 11:31:30 PM -- Attaching databases ...
6/18/2013 11:31:30 PM -- Prepare testing ends.
6/18/2013 11:31:30 PM -- Dispatching transactions begins ...
6/18/2013 11:31:30 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:30 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:36 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:36 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
6/18/2013 11:31:40 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 11:31:40 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:40 PM -- Attaining prerequisites:
6/18/2013 11:33:28 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210618000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:28 PM -- Performance logging ends.
6/20/2013 9:25:25 AM -- JetInterop batch transaction stats: 614214, 615393, 614395, 614415 and 615185.
6/20/2013 9:25:26 AM -- Dispatching transactions ends.
6/20/2013 9:25:26 AM -- Shutting down databases ...
6/20/2013 9:25:27 AM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete)
Instance376.5 (complete)
6/20/2013 9:25:27 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.blg has 5758 samples.
6/20/2013 9:25:27 AM -- Creating test report ...
6/20/2013 9:26:03 AM -- Instance376.1 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
```

```
6/20/2013 9:26:03 AM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 12.5 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 12.1 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 12.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/20/2013 9:26:03 AM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/20/2013 9:26:03 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:03 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:03 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_36.xml has 5750 samples queried.
6/20/2013 9:26:03 AM -- C:\Program Files\Exchange Jetstress\Stress 2013 6 18 23 31 36.html is saved.
6/20/2013 9:26:04 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:26:04 AM -- Verifying database checksums ...
6/20/2013 2:18:53 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
and C:\DB\DB5 (100% processed)
6/20/2013 2:18:53 PM -- Performance logging ends.
6/20/2013 2:18:53 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_3.blg has 585 samples.
6/20/2013 2:18:57 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_3.html is saved.
6/20/2013 2:18:57 PM -- Verifying log checksums ...
6/20/2013 2:18:58 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12 log(s) processed), C:\DB4 (12 log(s) pro
log(s) processed) and C:\DB\DB5 (13 log(s) processed)
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_14_18_58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_18_58.evt is saved.
6/20/2013 2:18:58 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_18_58.xml is saved.
6/20/2013 2:18:58 PM -- Jetstress testing ends.
6/20/2013 3:52:30 PM -- Jetstress testing begins ...
6/20/2013 3:52:30 PM -- Prepare testing begins ...
6/20/2013 3:52:35 PM -- Attaching databases ...
6/20/2013 3:52:35 PM -- Prepare testing ends.
6/20/2013 3:52:44 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:44 PM -- Backing up databases ...
```

```
6/20/2013 9:42:31 PM -- Performance logging ends.
6/20/2013 9:42:31 PM -- Instance376.1 (100% processed), Instance376.2 (100% processed), Instance376.3 (100% processed), Instance376.4
(100% processed) and Instance376.5 (100% processed)
6/20/2013 9:42:31 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 35.blg has 698 samples.
6/20/2013 9:42:31 PM -- Creating test report ...
6/20/2013 9:42:34 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_35.html is saved.
6/20/2013 9:42:34 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_42_34.evt is saved.
6/20/2013 9:42:34 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_42_34.evt is saved.
6/20/2013 9:42:34 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 20 21 42 34.xml is saved.
6/20/2013 9:42:34 PM -- Jetstress testing ends.
6/21/2013 8:32:25 AM -- Jetstress testing begins ...
6/21/2013 8:32:25 AM -- Prepare testing begins ...
6/21/2013 8:32:30 AM -- Attaching databases ...
6/21/2013 8:32:30 AM -- Prepare testing ends.
6/21/2013 8:32:30 AM -- Dispatching transactions begins ...
6/21/2013 8:32:30 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/21/2013 8:32:30 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:36 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:36 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:39 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:39 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:39 AM -- Generating log files ...
6/21/2013 9:42:46 AM -- C:\DB\DB1 (101.6% generated), C:\DB\DB2 (101.0% generated), C:\DB\DB3 (100.2% generated), C:\DB\DB4 (102.0%
generated) and C:\DB\DB5 (102.8% generated)
6/21/2013 9:42:46 AM -- Performance logging ends.
6/21/2013 9:42:46 AM -- JetInterop batch transaction stats: 22071, 21927, 21741, 21962 and 22218.
6/21/2013 9:42:47 AM -- Dispatching transactions ends.
6/21/2013 9:42:47 AM -- Shutting down databases ...
6/21/2013 9:42:48 AM -- Instance376.1 (complete), Instance376.2 (complete), Instance376.3 (complete), Instance376.4 (complete)
Instance376.5 (complete)
6/21/2013 9:42:48 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_36.blg has 280 samples.
6/21/2013 9:42:48 AM -- Creating test report ...
6/21/2013 9:42:49 AM -- Instance376.1 has 15.5 for I/O Database Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.1 has 0.9 for I/O Log Writes Average Latency.
```

```
6/21/2013 9:42:49 AM -- Instance376.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.2 has 15.0 for I/O Database Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:49 AM -- Instance376.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.3 has 14.9 for I/O Database Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:49 AM -- Instance376.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.4 has 14.5 for I/O Database Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:49 AM -- Instance376.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.5 has 14.6 for I/O Database Reads Average Latency.
6/21/2013 9:42:49 AM -- Instance376.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:49 AM -- Instance376.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:49 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:42:49 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:42:49 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_36.xml has 279 samples queried.
6/21/2013 9:42:49 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_36.html is saved.
6/28/2013 9:56:56 AM -- Performance logging begins (interval: 4000 ms).
6/28/2013 9:56:56 AM -- Recovering databases ...
6/28/2013 10:09:37 AM -- Performance logging ends.
6/28/2013 10:09:37 AM -- Instance376.1 (760.8783092), Instance376.2 (749.4744168), Instance376.3 (743.3746604), Instance376.4 (728.2578728)
and Instance376.5 (736.4792836)
6/28/2013 10:09:37 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_56_53.blg has 189 samples.
6/28/2013 10:09:37 AM -- Creating test report ...
```

Dell Compellent Storage Center 6.3 (SC8000) 50,000 Mailbox Exchange 2010 Resiliency Storage Solution

Server 9 – JS14

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance3036.1	509	727.7227944
Instance3036.2	505	722.6838975
Instance3036.3	501	725.6011536
Instance3036.4	507	744.4307157
Instance3036.5	502	724.5403332

Database Configuration

Instance3036.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb
Instance3036.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb
Instance3036.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb
Instance3036.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb
Instance3036.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3036.1	8.658	0.949	670.120	4.197	40935.429	32768.000	8.385	0.000	6.296	0.000	231974.938	0.000
Instance3036.2	8.501	0.892	661.808	4.196	40995.442	32768.000	9.340	0.000	6.294	0.000	232491.504	0.000
Instance3036.3	8.800	0.859	647.921	4.148	41089.555	32584.939	8.738	0.000	6.221	0.000	231235.907	0.000
Instance3036.4	8.670	0.872	659.187	4.084	40872.048	32768.000	9.132	0.000	6.126	0.000	232466.621	0.000
Instance3036.5	8.648	0.872	657.802	4.168	41006.399	32584.939	9.361	0.006	6.259	0.017	231187.689	2.860

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3036.1	26.635	261989.112
Instance3036.2	28.171	262008.457
Instance3036.3	26.663	262002.165
Instance3036.4	27.586	261799.470
Instance3036.5	26.698	262006.090

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3036.1	8.658	0.949	696.755	4.197	49385.807	32768.000	8.385	0.000	6.296	0.000	231974.938	0.000
Instance3036.2	8.501	0.892	689.979	4.196	50019.165	32768.000	9.340	0.000	6.294	0.000	232491.504	0.000
Instance3036.3	8.800	0.859	674.584	4.148	49821.191	32584.939	8.738	0.000	6.221	0.000	231235.907	0.000
Instance3036.4	8.670	0.872	686.773	4.084	49746.173	32768.000	9.132	0.000	6.126	0.000	232466.621	0.000
Instance3036.5	8.648	0.872	684.500	4.168	49626.139	32584.939	9.361	0.006	6.259	0.017	231187.689	2.860

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.845	0.000	8.274
Available MBytes	59954.853	59903.000	61115.000
Free System Page Table Entries	33555158.011	33555158.000	33555160.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	76869965.913	76865536.000	76898304.000
Pool Paged Bytes	232843731.478	232824832.000	232935424.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

6/21/2013 9:42:13 AM -- Instance3036.4 has 15.0 for I/O Database Reads Average Latency.

Test Log

```
6/21/2013 8:32:22 AM -- Jetstress testing begins ...
6/21/2013 8:32:22 AM -- Prepare testing begins ...
6/21/2013 8:32:27 AM -- Attaching databases ...
6/21/2013 8:32:27 AM -- Prepare testing ends.
6/21/2013 8:32:27 AM -- Dispatching transactions begins ...
6/21/2013 8:32:27 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/21/2013 8:32:27 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:33 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:33 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:36 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:36 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:36 AM -- Generating log files ...
6/21/2013 9:42:11 AM -- C:\DB\DB1 (101.8% generated), C:\DB\DB2 (101.0% generated), C:\DB\DB3 (100.2% generated), C:\DB\DB4 (101.4%
generated) and C:\DB\DB5 (100.4% generated)
6/21/2013 9:42:11 AM -- Performance logging ends.
6/21/2013 9:42:11 AM -- JetInterop batch transaction stats: 21887, 21893, 21588, 22100 and 21816.
6/21/2013 9:42:11 AM -- Dispatching transactions ends.
6/21/2013 9:42:11 AM -- Shutting down databases ...
6/21/2013 9:42:12 AM -- Instance3036.1 (complete), Instance3036.2 (complete), Instance3036.3 (complete), Instance3036.4 (complete)
Instance3036.5 (complete)
6/21/2013 9:42:12 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 33.blg has 277 samples.
6/21/2013 9:42:12 AM -- Creating test report ...
6/21/2013 9:42:13 AM -- Instance3036.1 has 14.7 for I/O Database Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.2 has 14.7 for I/O Database Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.3 has 14.9 for I/O Database Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.3 has 0.9 for I/O Log Reads Average Latency.
```

6/28/2013 10:09:27 AM -- Creating test report ...

```
6/21/2013 9:42:13 AM -- Instance3036.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.5 has 14.8 for I/O Database Reads Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:42:13 AM -- Instance3036.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:42:13 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:42:13 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:42:13 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 33.xml has 276 samples queried.
6/21/2013 9:42:14 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 33.html is saved.
6/28/2013 9:57:02 AM -- Performance logging begins (interval: 4000 ms).
6/28/2013 10:09:26 AM -- Performance logging ends.
6/28/2013 10:09:26 AM -- Instance3036.1 (727.7227944), Instance3036.2 (722.6838975), Instance3036.3 (725.6011536), Instance3036.4 (744.4307157) and Instance3036.5 (724.5403332)
6/28/2013 10:09:27 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery 2013 6 28 9 56 58.blg has 184 samples.
```

Server 10 – JS15

Soft-Recovery Statistics - All

Database Instance	Log files replayed	Elapsed seconds
Instance3368.1	507	735.4137423
Instance3368.2	505	740.9830494
Instance3368.3	501	734.3529219
Instance3368.4	509	781.0290195
Instance3368.5	509	746.8175616

Database Configuration

Instance3368.1	Log Path: C:\DB\DB1 Database: C:\DB\DB1\Jetstress001001.edb							
Instance3368.2	Log Path: C:\DB\DB2 Database: C:\DB\DB2\Jetstress002001.edb							
Instance3368.3	Log Path: C:\DB\DB3 Database: C:\DB\DB3\Jetstress003001.edb							
Instance3368.4	Log Path: C:\DB\DB4 Database: C:\DB\DB4\Jetstress004001.edb							
Instance3368.5	Log Path: C:\DB\DB5 Database: C:\DB\DB5\Jetstress005001.edb							

Transactional I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3368.1	8.670	0.912	646.809	4.135	41119.176	32586.961	9.032	0.000	6.202	0.000	231231.602	0.000
Instance3368.2	8.882	0.977	645.411	4.089	41155.281	32588.940	8.735	0.000	6.134	0.000	231287.772	0.000
Instance3368.3	8.558	0.915	647.450	4.093	41034.457	32768.000	9.450	0.000	6.140	0.000	232354.559	0.000
Instance3368.4	9.409	0.900	614.987	3.916	41575.641	32428.435	8.324	0.003	5.874	0.004	230147.766	2.653
Instance3368.5	8.830	0.892	645.627	4.092	41118.994	32589.913	9.067	0.000	6.137	0.000	231178.060	0.000

Background Database Maintenance I/O Performance

MSExchange Database ==> Instances	Database Maintenance IO Reads/sec	Database Maintenance IO Reads Average Bytes
Instance3368.1	28.411	261809.073
Instance3368.2	27.250	262017.414
Instance3368.3	29.743	261991.644
Instance3368.4	26.277	262070.542
Instance3368.5	27.351	261999.051

Total I/O Performance

MSExchange Database ==> Instances	I/O Database Reads Average Latency (msec)	I/O Database Writes Average Latency (msec)	I/O Database Reads/sec	I/O Database Writes/sec	I/O Database Reads Average Bytes	I/O Database Writes Average Bytes	I/O Log Reads Average Latency (msec)	I/O Log Writes Average Latency (msec)	I/O Log Reads/sec	I/O Log Writes/sec	I/O Log Reads Average Bytes	I/O Log Writes Average Bytes
Instance3368.1	8.670	0.912	675.220	4.135	50405.171	32586.961	9.032	0.000	6.202	0.000	231231.602	0.000
Instance3368.2	8.882	0.977	672.661	4.089	50102.418	32588.940	8.735	0.000	6.134	0.000	231287.772	0.000
Instance3368.3	8.558	0.915	677.193	4.093	50739.081	32768.000	9.450	0.000	6.140	0.000	232354.559	0.000
Instance3368.4	9.409	0.900	641.263	3.916	50610.718	32428.435	8.324	0.003	5.874	0.004	230147.766	2.653
Instance3368.5	8.830	0.892	672.978	4.092	50096.029	32589.913	9.067	0.000	6.137	0.000	231178.060	0.000

Host System Performance

Counter	Average	Minimum	Maximum
% Processor Time	1.737	0.000	9.497
Available MBytes	59955.995	59903.000	61116.000
Free System Page Table Entries	33555158.000	33555158.000	33555158.000
Transition Pages RePurposed/sec	0.000	0.000	0.000
Pool Nonpaged Bytes	74842449.814	74838016.000	74878976.000
Pool Paged Bytes	232222762.227	232206336.000	232321024.000
Database Page Fault Stalls/sec	0.000	0.000	0.000

Test Log

```
6/18/2013 10:57:05 AM -- Jetstress testing begins ...
6/18/2013 10:57:05 AM -- Prepare testing begins ...
6/18/2013 10:57:11 AM -- Attaching databases ...
6/18/2013 10:57:11 AM -- Prepare testing ends.
6/18/2013 10:57:11 AM -- Dispatching transactions begins ...
6/18/2013 10:57:11 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 10:57:11 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 10:57:17 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 10:57:17 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 10:57:22 AM -- Operation mix: Sessions 3, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 10:57:22 AM -- Performance logging begins (interval: 15000 ms).
6/18/2013 10:57:22 AM -- Attaining prerequisites:
6/18/2013 11:00:09 AM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1216705000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 1:00:10 PM -- Performance logging ends.
6/18/2013 1:01:44 PM -- JetInterop batch transaction stats: 27048, 27032, 26988, 26878 and 26468.
6/18/2013 1:01:44 PM -- Dispatching transactions ends.
6/18/2013 1:01:44 PM -- Shutting down databases ...
6/18/2013 1:01:45 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and
Instance3368.5 (complete)
6/18/2013 1:01:45 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 17.blg has 490 samples.
6/18/2013 1:01:45 PM -- Creating test report ...
6/18/2013 1:01:50 PM -- Instance3368.1 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 9.1 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 9.8 for I/O Database Reads Average Latency.
```

```
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 9.2 for I/O Database Reads Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 1:01:50 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 1:01:50 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 1:01:50 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 17.xml has 478 samples gueried.
6/18/2013 1:01:50 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 10 57 17.html is saved.
6/18/2013 1:01:51 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 1:01:51 PM -- Verifying database checksums ...
6/18/2013 1:03:26 PM -- C:\DB\DB1 (0% processed), C:\DB\DB2 (0% processed), C:\DB\DB3 (0% processed), C:\DB\DB4 (0% processed) and
C:\DB\DB5 (0% processed)
6/18/2013 1:03:27 PM -- Verifying log checksums ...
6/18/2013 1:03:27 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_13_3_27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_13_3_27.evt is saved.
6/18/2013 1:03:27 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_13_3_27.xml is saved.
6/18/2013 1:03:27 PM -- Jetstress testing ends.
6/18/2013 1:10:56 PM -- Jetstress testing begins ...
6/18/2013 1:10:56 PM -- Prepare testing begins ...
6/18/2013 1:11:01 PM -- Attaching databases ...
6/18/2013 1:11:01 PM -- Prepare testing ends.
6/18/2013 1:11:01 PM -- Dispatching transactions begins ...
6/18/2013 1:11:01 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 1:11:01 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 1:11:07 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 1:11:07 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 1:11:12 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 1:11:12 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 1:11:12 PM -- Attaining prerequisites:
6/18/2013 1:13:03 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1209389000.0 (lower bound: 1207960000.0, upper
bound: none)
```

```
6/18/2013 3:13:04 PM -- Performance logging ends.
6/18/2013 3:13:23 PM -- JetInterop batch transaction stats: 35518, 35669, 35556, 35802 and 35966.
6/18/2013 3:13:23 PM -- Dispatching transactions ends.
6/18/2013 3:13:23 PM -- Shutting down databases ...
6/18/2013 3:13:24 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and
Instance3368.5 (complete)
6/18/2013 3:13:24 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.blg has 486 samples.
6/18/2013 3:13:24 PM -- Creating test report ...
6/18/2013 3:13:27 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 12.7 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 14.0 for I/O Database Reads Average Latency.
6/18/2013 3:13:27 PM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/18/2013 3:13:28 PM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/18/2013 3:13:28 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 3:13:28 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.xml has 478 samples queried.
6/18/2013 3:13:28 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_13_11_7.html is saved.
6/18/2013 3:13:29 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 3:13:29 PM -- Verifying database checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (2% processed), C:\DB\DB2 (2% processed), C:\DB\DB3 (2% processed), C:\DB\DB4 (2% processed) and
C:\DB\DB5 (2% processed)
6/18/2013 3:20:18 PM -- Verifying log checksums ...
6/18/2013 3:20:18 PM -- C:\DB\DB1 (0 log(s) processed), C:\DB\DB2 (0 log(s) processed), C:\DB\DB3 (0 log(s) processed), C:\DB\DB4 (0 log(s)
processed) and C:\DB\DB5 (0 log(s) processed)
```

```
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_15_20_18.evt is saved.
6/18/2013 3:20:18 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_18_15_20_18.xml is saved.
6/18/2013 3:20:18 PM -- Jetstress testing ends.
6/18/2013 3:30:44 PM -- Jetstress testing begins ...
6/18/2013 3:30:44 PM -- Prepare testing begins ...
6/18/2013 3:30:50 PM -- Attaching databases ...
6/18/2013 3:30:50 PM -- Prepare testing ends.
6/18/2013 3:30:50 PM -- Dispatching transactions begins ...
6/18/2013 3:30:50 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 3:30:50 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 3:30:56 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/18/2013 3:30:56 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/18/2013 3:31:00 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/18/2013 3:31:00 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 3:31:00 PM -- Attaining prerequisites:
6/18/2013 3:32:27 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1211609000.0 (lower bound: 1207960000.0, upper
bound: none)
6/18/2013 5:32:28 PM -- Performance logging ends.
6/18/2013 6:06:29 PM -- JetInterop batch transaction stats: 44740, 45056, 44895, 45109 and 44950.
6/18/2013 6:06:29 PM -- Dispatching transactions ends.
6/18/2013 6:06:29 PM -- Shutting down databases ...
6/18/2013 6:06:31 PM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and
Instance3368.5 (complete)
6/18/2013 6:06:31 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.blg has 485 samples.
6/18/2013 6:06:31 PM -- Creating test report ...
6/18/2013 6:06:34 PM -- Instance3368.1 has 12.5 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.1 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.2 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 12.6 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Writes Average Latency.
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6/18/2013 6:06:34 PM -- Instance3368.3 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 14.1 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.4 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 12.8 for I/O Database Reads Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Writes Average Latency.
6/18/2013 6:06:34 PM -- Instance3368.5 has 0.9 for I/O Log Reads Average Latency.
6/18/2013 6:06:34 PM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/18/2013 6:06:34 PM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 18 15 30 56.xml has 479 samples queried.
6/18/2013 6:06:34 PM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_18_15_30_56.html is saved.
6/18/2013 6:06:35 PM -- Performance logging begins (interval: 30000 ms).
6/18/2013 6:06:35 PM -- Verifying database checksums ...
6/18/2013 11:00:55 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100%
processed) and C:\DB\DB5 (100% processed)
6/18/2013 11:00:55 PM -- Performance logging ends.
6/18/2013 11:00:55 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.blg has 588 samples.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_18_18_6_34.html is saved.
6/18/2013 11:00:59 PM -- Verifying log checksums ...
6/18/2013 11:00:59 PM -- C:\DB\DB1 (11 log(s) processed), C:\DB\DB2 (12 log(s) processed), C:\DB\DB3 (12 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_18_23_0_59.evt is saved.
6/18/2013 11:00:59 PM -- C:\Program Files\Exchange Jetstress\XmlConfig 2013 6 18 23 0 59.xml is saved.
6/18/2013 11:00:59 PM -- Jetstress testing ends.
6/18/2013 11:31:30 PM -- Jetstress testing begins ...
6/18/2013 11:31:30 PM -- Prepare testing begins ...
6/18/2013 11:31:36 PM -- Attaching databases ...
6/18/2013 11:31:36 PM -- Prepare testing ends.
6/18/2013 11:31:36 PM -- Dispatching transactions begins ...
6/18/2013 11:31:36 PM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
6/18/2013 11:31:36 PM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/18/2013 11:31:42 PM -- Database read latency thresholds: (average: 20 msec/read, maximum: 200 msec/read).
6/18/2013 11:31:42 PM -- Log write latency thresholds: (average: 10 msec/write, maximum: 200 msec/write).
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6/18/2013 11:31:47 PM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.

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6/18/2013 11:31:47 PM -- Performance logging begins (interval: 15000 ms).
6/18/2013 11:31:47 PM -- Attaining prerequisites:
6/18/2013 11:33:44 PM -- \MSExchange Database(JetstressWin)\Database Cache Size, Last: 1210147000.0 (lower bound: 1207960000.0, upper
bound: none)
6/19/2013 11:33:45 PM -- Performance logging ends.
6/20/2013 9:25:31 AM -- JetInterop batch transaction stats: 570046, 568431, 569389, 570233 and 570725.
6/20/2013 9:25:31 AM -- Dispatching transactions ends.
6/20/2013 9:25:31 AM -- Shutting down databases ...
6/20/2013 9:25:33 AM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and
Instance3368.5 (complete)
6/20/2013 9:25:33 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.blg has 5758 samples.
6/20/2013 9:25:33 AM -- Creating test report ...
6/20/2013 9:26:08 AM -- Instance3368.1 has 12.6 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.1 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 12.9 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.2 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 12.7 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.3 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 14.2 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.4 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 13.0 for I/O Database Reads Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Writes Average Latency.
6/20/2013 9:26:08 AM -- Instance3368.5 has 1.0 for I/O Log Reads Average Latency.
6/20/2013 9:26:08 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/20/2013 9:26:08 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/20/2013 9:26:08 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.xml has 5750 samples gueried.
6/20/2013 9:26:08 AM -- C:\Program Files\Exchange Jetstress\Stress_2013_6_18_23_31_42.html is saved.
6/20/2013 9:26:09 AM -- Performance logging begins (interval: 30000 ms).
6/20/2013 9:26:09 AM -- Verifying database checksums ...
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6/20/2013 2:30:14 PM -- C:\DB\DB1 (100% processed), C:\DB\DB2 (100% processed), C:\DB\DB3 (100% processed), C:\DB\DB4 (100% processed)
and C:\DB\DB5 (100% processed)
6/20/2013 2:30:14 PM -- Performance logging ends.
6/20/2013 2:30:14 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_8.blg has 607 samples.
6/20/2013 2:30:18 PM -- C:\Program Files\Exchange Jetstress\DBChecksum_2013_6_20_9_26_8.html is saved.
6/20/2013 2:30:18 PM -- Verifying log checksums ...
6/20/2013 2:30:19 PM -- C:\DB\DB1 (12 log(s) processed), C:\DB\DB2 (10 log(s) processed), C:\DB\DB3 (11 log(s) processed), C:\DB\DB4 (12
log(s) processed) and C:\DB\DB5 (12 log(s) processed)
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\Application 2013 6 20 14 30 19.evt is saved.
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_14_30_19.evt is saved.
6/20/2013 2:30:19 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_14_30_19.xml is saved.
6/20/2013 2:30:19 PM -- Jetstress testing ends.
6/20/2013 3:52:34 PM -- Jetstress testing begins ...
6/20/2013 3:52:34 PM -- Prepare testing begins ...
6/20/2013 3:52:40 PM -- Attaching databases ...
6/20/2013 3:52:40 PM -- Prepare testing ends.
6/20/2013 3:52:48 PM -- Performance logging begins (interval: 30000 ms).
6/20/2013 3:52:48 PM -- Backing up databases ...
6/20/2013 9:49:46 PM -- Performance logging ends.
6/20/2013 9:49:46 PM -- Instance3368.1 (100% processed), Instance3368.2 (100% processed), Instance3368.3 (100% processed), Instance3368.4
(100% processed) and Instance3368.5 (100% processed)
6/20/2013 9:49:47 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup_2013_6_20_15_52_40.blg has 713 samples.
6/20/2013 9:49:47 PM -- Creating test report ...
6/20/2013 9:49:50 PM -- C:\Program Files\Exchange Jetstress\DatabaseBackup 2013 6 20 15 52 40.html is saved.
6/20/2013 9:49:50 PM -- C:\Program Files\Exchange Jetstress\Application_2013_6_20_21_49_50.evt is saved.
6/20/2013 9:49:50 PM -- C:\Program Files\Exchange Jetstress\System_2013_6_20_21_49_50.evt is saved.
6/20/2013 9:49:50 PM -- C:\Program Files\Exchange Jetstress\XmlConfig_2013_6_20_21_49_50.xml is saved.
6/20/2013 9:49:50 PM -- Jetstress testing ends.
6/21/2013 8:32:18 AM -- Jetstress testing begins ...
6/21/2013 8:32:18 AM -- Prepare testing begins ...
6/21/2013 8:32:24 AM -- Attaching databases ...
6/21/2013 8:32:24 AM -- Prepare testing ends.
6/21/2013 8:32:24 AM -- Dispatching transactions begins ...
6/21/2013 8:32:24 AM -- Database cache settings: (minimum: 160.0 MB, maximum: 1.2 GB)
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6/21/2013 8:32:24 AM -- Database flush thresholds: (start: 12.8 MB, stop: 25.6 MB)
6/21/2013 8:32:30 AM -- Database read latency thresholds: (average: 20 msec/read, maximum: 100 msec/read).
6/21/2013 8:32:30 AM -- Log write latency thresholds: (average: 10 msec/write, maximum: 100 msec/write).
6/21/2013 8:32:34 AM -- Operation mix: Sessions 5, Inserts 40%, Deletes 20%, Replaces 5%, Reads 35%, Lazy Commits 70%.
6/21/2013 8:32:34 AM -- Performance logging begins (interval: 15000 ms).
6/21/2013 8:32:34 AM -- Generating log files ...
6/21/2013 9:45:04 AM -- C:\DB\DB1 (101.4% generated), C:\DB\DB2 (101.0% generated), C:\DB\DB3 (100.2% generated), C:\DB\DB4 (101.8%
generated) and C:\DB\DB5 (101.8% generated)
6/21/2013 9:45:04 AM -- Performance logging ends.
6/21/2013 9:45:04 AM -- JetInterop batch transaction stats: 21852, 21855, 21776, 22053 and 21973.
6/21/2013 9:45:04 AM -- Dispatching transactions ends.
6/21/2013 9:45:04 AM -- Shutting down databases ...
6/21/2013 9:45:05 AM -- Instance3368.1 (complete), Instance3368.2 (complete), Instance3368.3 (complete), Instance3368.4 (complete) and
Instance3368.5 (complete)
6/21/2013 9:45:05 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 30.blg has 289 samples.
6/21/2013 9:45:05 AM -- Creating test report ...
6/21/2013 9:45:06 AM -- Instance3368.1 has 15.1 for I/O Database Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.1 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.1 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.2 has 15.3 for I/O Database Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.2 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.2 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.3 has 15.2 for I/O Database Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.3 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.3 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.4 has 16.8 for I/O Database Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.4 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.4 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.5 has 15.4 for I/O Database Reads Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.5 has 0.9 for I/O Log Writes Average Latency.
6/21/2013 9:45:06 AM -- Instance3368.5 has 0.9 for I/O Log Reads Average Latency.
6/21/2013 9:45:06 AM -- Test has 0 Maximum Database Page Fault Stalls/sec.
6/21/2013 9:45:06 AM -- Test has 0 Database Page Fault Stalls/sec samples higher than 0.
6/21/2013 9:45:06 AM -- C:\Program Files\Exchange Jetstress\Performance 2013 6 21 8 32 30.xml has 288 samples gueried.
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6/21/2013 9:45:07 AM -- C:\Program Files\Exchange Jetstress\Performance_2013_6_21_8_32_30.html is saved.

6/28/2013 9:57:13 AM -- Performance logging begins (interval: 4000 ms).

6/28/2013 9:57:13 AM -- Recovering databases ...

6/28/2013 10:10:14 AM -- Performance logging ends.

6/28/2013 10:10:14 AM -- Instance3368.1 (735.4137423), Instance3368.2 (740.9830494), Instance3368.3 (734.3529219), Instance3368.4

(781.0290195) and Instance3368.5 (746.8175616)

6/28/2013 10:10:15 AM -- C:\Program Files\Exchange Jetstress\SoftRecovery_2013_6_28_9_57_10.blg has 194 samples.

6/28/2013 10:10:15 AM -- Creating test report ...